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BIJNOR:

A GAZETTEER,

BEING

VOLUME XIV

OF THE

DISTRICT GAZETTEERS OF THE UNITED PROVINCES OF AGRA AND OUDH

BY

H. R. NEVILL, ICS., F.R.G.S., F.S.S., M.R.A.S.



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PREFACE.

THE former Gazetteer of Bijnor was compiled by Mr. H. C. Conybeare, mainly from the Settlement Report of Mr. A. M. Markham and notes contributed by Messrs. F. I. Petre and H. B. Punnett. Since its publication the district has undergone great changes, especially in connection with the assessment of land revenue, the growth of population, and the development of communications and trade; so that the volume had become to a large extent obsolete. In preparing the new Gazetteer I have derived much assistance from the Settlement Reports of Mr. F. J. Pert and Mr. A. T. Holme; and I must also express my thanks to Mr. C £. Wild, for the supply of much new material and for his ready help in revising the proofs. I am indebted, as usual, to Mr. R. Burn, for the portion dealing with the ancient history of the District.

Allahabad:
December 1907.

H. R. N.

GAZETTEER OF BIJNOR.

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ABBREVIATIONS.

- J. R. A. S.—Journal of the Royal Asiatic Society.
- J. A. S. B .-- Journal of the Bengal Asiatic Society.
- C. A. S. R.—Cunningham's Archæological Survey Reports.
- E. H. I.—The History of India, as told by its own Historians, by Sir H. M. Elliot: London, 1877.

CHAPTER I.

GENERAL FEATURES.

Bijnor, or more correctly Bijnaur, occupies the north-west Boundcorner of the Rohilkhand or Barerlly Division, and is a roughly triangular stretch of country with its apex to the north. The western boundary is formed throughout by the deep stream of the liver Ganges, beyond which he the four districts of Dehia Dun, Saharanpur, Muzaffarnagar and Meerut, all belonging to the Meetut Division. To the north and north-east is the hill country of Garhwal, the dividing line being the submontane road, which runs from Hardwar along the foot of the Himalayas to Ramnagar, Haldwani and Tanakpur. This road, popularly known as the Kandı Sarak, belongs throughout its length to Gaihwal, the transfer having taken place a few years since. On the cast the Phika river for the greater part of its course constitutes the Loundary, separating this district from Naim Tal and Moradahad, as far as its junction with the Ramganga; and to the south lie the Thakurdwara, Amreha, and Hasanpur tahsils of Moradabad, the boundary leing conventional and undetermined by natural features The extreme parallels of north latitude are 29° 2' and 29° 58', and of east longitude 78° 0' and 78° 57' From Lalitpur, the most northerly point, to Koti Pao in the furthest eastern corner the distance is 56 miles; from Koti Rao to Kamhana in the south-westerly angle 57 miles, and from Kamhanato Lalitpun 62 miles The total area of the district is hable to change slightly from time to time by eason of the criatic action of the Ganges and Ramganga: in 1906 it amounted to 0 1,145,272 acres or 1789.5 square miles, the average for the last five years being 1,147,967 acres.

In its physical aspects the district possesses many diverse characteristics; to such an extent indeed that an exhaustive description cannot here be attempted. The various natural divisions may be briefly indicated, but for a fuller account reference must

aries and

Topogra-

be made to the articles on the different parganas in the second half of this volume. By far the greater portion of the district is open and highly cultivated country, such as is found throughout the north of Rohilkhand. The surface is broken by several rivers of considerable size and their many tributaries, while the valleys of the more important dramage lines possess distinctive features as compared with the upland champaign. This alternation of level country and riverain depressions extends northwards to a broad belt of forest, which forms a funge along the whole of the north-eastern border, and where the district narrows towards its northern angle, widens out so as to occupy the entire breadth. And lastly, in the north angle itself, is a small range of low hills, constituting the outwork of the great Himalayan chain. southern ridges of the mountains in these provinces vary in their general character: for while in the Saharanpur district to the west the old Siwalik formation is preserved in its entirety, we find in the eastern half of Kumaun a different state of affairs. There the place of the Siwaliks is taken by the gradual slope of the Bhabar, a waterless tract formed of boulders and detritus from the hills, underneath the water sinks to a great depth, to regain the surface, as it were by syphonic influence, in the swamps of the Tarai. In Bijnor the two systems blend, for the hills in the extreme north are practically an easterly continuation of the Siwalik chain separating Saharanpur from Dehra Dun; while further east the Bhabar characteristics are present, though in a modified The bed of boulders and gravel is here much more narrow and less clearly marked than in Nami Tal; the slope is more gentle and the absence of water less conspicuous. As a result of this. the distinguishing features of the Tararto the south are generally absent. In the place of mere tonent leds, only filled by sudder freshets, and gradually merging into the Tarai swamps, we find in Bijnor a number of perennial streams, though at the same tim the diffusion of water is imperfect, and this probably accounts for the general dearth of fine timber in the forest tract. Still the northern belt is as a whole moist and fertile, with a luxuriant growth of small trees and valuable grasses, and shows little o' that denudation of the surface soil which leaves great patches sterile boulder-strewn ground in the country to the east.

Of the various natural divisions of the district the hill tract The in the extreme north is by far the smallest. It occupies an area of hills. about 25 square miles only, and the whole of this is included in the Government reserved forests. The economic aspects of the tract will therefore be treated later, in giving an account of the forests and their management. As already mentioned, the hills are apparently an easterly extension of the Siwalıks, and project southwards as a sput from the higher ranges of Gathwal. They include two main ridges, which unite close to the district boundary, about six miles east of Hardwar: one running due west and terminating in the Chandi peak, which rises to a height of 1,928 feet above the level of the sea, and is surmounted by a temple overlooking the valley of the Ganges; and the other leading to the south-west, separated from the former by the Anjan Sot, and draining on the south into the Paili Rao. The hills are little more than rugged and barren rocks, uncultivated and uninhabited; but on the lower slopes and in the valleys trees are more numerous and there is a luxuriant growth of lamboos, which constitute the chief source of revenue from these forests Geologically they belong to the upper tertiary series, and comprise, towards the plains, a centle normal anticlinal aich in middle Siwalik soft sandock. This is of a very milaceous character, and is in a hapid state of decay by weathering; its consistency, however, aries to a considerable extent, for in places it is loose and acoherent, causing frequent landslips, while elsewhere it has ecome so indurated as to resist blasting like granite. Further north, towards the Ga hwal Lorder, the rock changes into upper Siwalik conglomerate, the soft brown sandstone being interstratified with Loulders, purple shales and clays, and here landups are extremely common. This belt is of narrow width, and parates the hills of Bijnor from the slaty rocks of the outer imalayas proper. The soil on these hills is, as a rule, very poor, Mry and shallow, being either sandy or a stiff clay; denudation is constantly going on, and the reproduction of tree growth is yery slow and uncertain. At the foot of the hills, both on the south and north-west, the soil is a good alluvial deposit over a deep bed of boulders.

The second or forest tract extends from the reservel forestsin the level portions of the Chandi circle on the west to those of Rebar on the extreme cast. The intervening space consists of privately owned jungle, mainly the property of the Raja of Kashipur and the Jat family of Sahanpur, and has a width ranging from two to ten miles Of late years extensive clearings have been made in this area, and in a few places the cultivation is now continuous as far as the submontane road which skirts the northern boundary. The level in this belt sinks towards the east or south At the foot of the Chandi hills, which rise abruptly from the plain the flat country is about 950 fect alove the sca, and this drops t 909 feet at Sahalgarh and to 890 feet at Najihahad on the southern outskirts of the forest Further east the level sinks to 858 feet at Barhapura, while beyond the Ramganga the fall i very much more rapid. Kalagarh on the submontane roal shows a height of 871 feet, and the low country only six miles to the south is fully 100 feet less. The surface of the ground, however, is very uneven throughout the tract, for the level is broken by innumerable streams and watercourses which carry off the drainage from the neighbouring hills of Garhwal, the channels of the larger rivers having wide valleys on either side, while the banks of the smaller torrents are scored in every direction by ratines. Otherwise the forest area, which covers some 370 square miles and is widest in the Najibal ad pargana, is a fertile strotch. of country, covered with trees of an infinior description or else, spreading out into wide expanses of grass jungle It is no doubt of great value as a pasture ground, but nearly all of it is culture able. In the valleys the soil is righ and moist, while on this. higher levels it is, though lighter in texture, capable of Learning excellent crops in all but the direct seasons. The surface depos en which overlies the coarse gravel detritus is far deeper here thand in the true Bhabar to the east; but on the other hand cultivation is necessarily precarious by reason of the forest, which not only to affords shelter to the numberless wild animals who proy upon the crops, but also renders the climate unhealthy and malarious ant the extreme. Under existing circumstances the population of very scanty and the rental capacity of the land but small: ts track is consequently liable to periods of depression which occi-

with great suddenness and take long to disappear. That this part of the country is capable of vast economic improvement can hardly be doubted. The proof lies, if proof be not led, in the fact that once the land was fully cultivated, as is evident from the existence of ancient mango groves, masonry wells and ruined buildings, sometimes extending over several miles consecutively. Nothing is known of these early inhabitants, beyon! their fortresses and sculptured relies, but the same phenomenon appears throughout the Bhalar in Naini Tal, as also in the lowlands of Gonda, Gorakhpur and Basti beneath the outer mountains of the Nepalese Hima'ayas. Still, in spite of the relapse, the forest tract is a source of considerable wealth to the owners The timber, poor as it is, nevertheless finds a ready market, while large sums are derived from grazing dues and the sale of grass, which is used extensively for that hing and the manufacture of repes, baskets and matting.

To the south of the forest belt lies an open expanse of country, which continues to the southern borders of the districts and on into Moradabad and the wide plains of Robinshand and Oudh. The surface is gently undulating and his show the low valleys of the rivers to the sandy ridges which mark the water-partings. The two main divisions of the country are those of the uplands and the lowlands, the former constituting about 64 per cent. of the whole. In either case the general slope of the country is from north to south, but both divisions consist of several fairly distinct tracts, each with more or less peculiar characteristics of its own.

In the uplands there are three such belts, each running north and south and comprising almost parallel strips of country. The western uplands comprise the natural watershed between the Ganges and the central drainage lines, extending from the forests of Najibabad in the north to the southern boundary of pargana Bashta. The tract is subdivided into three unequal belts by the Malin and Chhoiya rivers, which have cut their way through the high ground at some remote period. These three portions form a series of low sandy ridges running generally parallel to the Ganges, and separated by broad and level plains, which gradually slope down on all sides into the surrounding valleys. The

The open

Western uplands.

western extremity of these uplands is marked by the high bank of the Ganges, from which the land slopes gently towards the interior. the level surface being only broken by the long ridges of sand. The latter owe their origin in many cases to the action of the westerly winds, which have blown the sand inland from the Ganges bed. They are now, however, for the most part stationary, being bound together by the roots of weeds and scrub; and there are but few which in years of favourable rain cannot be made to produce barley or the coarser crops. These sandhills are to be found overlying the good soil in various parts of the district, but they are most common towards the south-west, in the parganas of Chandpur and Bashta. With few exceptions, they are cultivated, but the poverty of the soil necessitates a constant succession of long fallows. Elsewhere the soil, though containing a considerable admixture of sand, is usually a fair loam, passing occasionally into a stiff clay. As a whole, the western belt is characterized by sparse population, inferior tillage, and an inadequate water supply, the harvest being entirely dependent on good and seasonable rains. The drop of the country from north to south is clearly illustrated by the recorded levels. Thus Nagal = in the extreme north, near the high bank of the Ganges, is 858 feet above the sea; Mandawar 784 feet, Bijnor 772 feet, Chandpur 741 feet, and Bashta 720 feet.

To the east of the western watershed the country slopes gradually down into a broad lowlying belt which traverses the whole of the central portion of the district. It is drained by the Ban, Gangan and Karula rivers, all of which flow from north to south, and have their origin in the northern portion of the tract. This belt is in every way superior to the western uplands, and almost the whole of it is of good quality. It possesses a soft friable loam soil, containing but a slight admixture of sand, while in the depressions and along the drainage lines is found a hard and stiff clay. The country is thickly populated, highly cultivated, and practically free from any serious injury in time of drought, as means of irrigation are exceptionally abundant. Unprotected wells can be dug with ease in all parts, and they are supplemented by the canals from the Khoh and Gangan. The land in the neighbourhood of the Ban and its tributaries is apt to be

injured in years of heavy rain, but as a whole, the tract is superior to any other part of the district. The rapid fall of the country is fully as marked as in the western uplands. The level drops from 825 feet at Aklarabad in the north to 780 feet at Nihtaur, 741 feet at Nurpui, and 728 feet at Pheona near the southern boundary.

Beyond the Karula to the east the country again changes in Eastern character, comprising a third and comparatively narrow belt which extends as far as the valley of the Khoh and Ramganga. Down the centre, from Nagma to the southern boundary of the district, runs the watershed between the Khoh and the Gangan system, and on the ridge the soil is sandy, though very superior to that of the western tract. More usually it is loam of good quality, gradually merging into clay where depressions occur in the surface. From Nagina, 810 feet above the sea, the level drops to 763 feet at Dhampur, 727 feet at Seohara, and 715 feet at Sahaspur. Though possessing an irregular surface, this belt is fairly level, and is a closely populated tract with several large towns, which have developed rapidly since the construction of the railway. Irrigation from wells and natural sources is

generally plentiful, while the canal affords an additional supply.

into a wide stretch of low alluvial ground, extending to the eastern boundary of the district. The tract is, however, far from. being homogeneous in character In the low valleys of the Khoh and Ramganga the soil is rich and fertile; a large proportion being permanently cultivated, while the rest is subject to fluvial action. The khadurs of these rivers closely resemble one another, having in either case two levels, but the lower khadir of the Ramganga is far more liable to change than that of the Khoh, and though the deposit of the former river is the more fertile, the deterioration liable to result from heavy floods is greater. Between these two rivers lies an extensive raised tract stretching southwards from the forests of the north. Here the soil is light

and uneven, water is at a considerable distance from the surface, the population is scanty, and the climate unhealthy. In spiteof these disadvantages, excellent crops of all kinds are obtained,

uplands.

The uplands terminate on the east in the high bank above Transthe basin of the Khoh, and the aspect of the country then changes Khoh

so long as the rainfall is seasonable and heavy. Beyond the Ramganga again the land rises, and the soil, more or less alluvial in character, consists largely of excellent loam and clay. On the east lie the forests of Rehar, and here the country bears a closer resemblance to the Tarai of the Naini Tal district, the climate being very malarious, resulting in heavy mortality among men and cattle during wet years. In the neighbourhood of the forest the villages are always precarious, but to the south the cultivation is considerable and attains a high standard; the superior crops are extensively grown, water is within reach of the surface, the population is fairly dense, and as a rule rents run high. The country east of the Khoh falls to the south with a slope very similar to that of the upland bangar. Baihapura on the forest edge stands at a height of 858 feet above the sea, while Afzalgarh is but 753 feet, and Sherkot, in the Khoh valley, only 724 feet.

anges

There remains the low fringe of khadir along the Ganges to the west. This generally resembles the lowlands that skirt the rivers of the interior, the low flats which adjoin the stream itself being purely alluvial in character, while above them rises a terrace of higher ground extending inland as far as the chain of stagnant morasses lying immediately under the bangar cliff. But the kh idir in this district, at any rate in the southern parganas, is of a very poor description and no whit botter than that on the opposite bank in Muzaffarnagar and Meerut. mic history has been much the same. Less than a century ago the tract was the haunt of tigers and even occasional herds of wild elephants. Much of it was reclaimed and the bottomless mud of the swamps, in which within the memory of man an elephant was engulfed, was converted into rich ricefields. came a series of wet years and saturation made its appearance: the cultivators left their holdings, and the fields relapsed into grass jungle; and the climax was reached when the inhabitants fled en masse during the great scare of 1894, caused by the expectation of a disastrous flood from the breaking of the embankment which held up the Gohna lake in the hills of Garhwal. Since that time there has been some slight recovery, but the tract remains in the highest degree precarious. The aspect of the khadir varies in

different portions of its length. In Najibabad to the north it is a narrow and almost insignificant strip, but in pargana Mandawar it widens out into a famly level tract of alluvial loam and clay, capable of bearing good crops in favourable years, but always liable to inundation. Here the eastward tendency of the river has destroyed several large villages, and the fertile ground has in many cases been transformed into barren sand, and further inland saturation has been caused by the floods and the whole tract is in an advanced stage of deterioration. In Bimor the khadar proper is a narrow belt, consisting mainly of sand and tamarisk jungle, which shelters numerous wild animals; but above the present flood bank is a level and prosperous stretch of country in a high state of cultivation and producing the superior crops in abundance. Further south, in the Daianagar pargana, the high bank approaches close to the stream, and below the steep bluff is a very narrow strip of inferior clay and sand, seldom cultivated and producing little but thatching grass In Bashta. however, the high bank recedes inland, leaving two broad belts of upper and lower khadur, in either case swampy, feverish, liable to damage by floods or saturation, and with bad water in the village wells. Both cultivation and population have greatly declined of late years, necessitating large reductions of revenue. and the tract is the most backward and precaious portion of the entire district.

As the whole country to the south of the hills and the low Soils. Bhabar at their base consists of riverain alluvium of varying age. it necessarily follows that the composition of the soil is more or less uniform. The variations in its character appear to depend solely on the level, and the district affords no exception to the general rule prevailing throughout the Gangetic plain. On the higher ground the soil is light and sandy, often pure sand; on the level stretches it is a mixture of sand and clay in varying proportions, classified generically as loam; and in the low country and the depressions of the uplands the sand disappears, leaving nothing but a stiff argillaceous clay. The more recent deposits left behind them by the rivers when the waters recede after the annual floods differ with the nature of the inundation: a strong current will carry away all but the heavier particles of sand

while a stream of less violence is beneficial in its action, as the mud settles gently, with the result that the flooded ground is covered with a firtile layer of the richest loam. The natural soils fall into four main divisions, which are, and from time immemorial have been, fully recognised by the people. The first of these is bhur or sandy soil, in which the proportion of loam isextremely small · it is naturally of a very inferior description, and only produces indifferent crops of the coarser grams. Next comes bhur-sawai, or sandy loam, in which sand still predominates; this is far superior to mere bhur, yielding fair crops of wheat, barley and sugarcane. The true loam is here known as sawai, a term equivalent to the rausli of the northern Doab and the dumat of other parts. Its very name denotes its exceptional fertility, and in appearance it is a light and friable soil; it is capable of producing every kind of crop, but is usually reserved for the more valuable staples, its fertility being enhanced by almost all the available supply of water and manure. Clay, known by the common name of matiyar, is highly productive in seasons of suitable moisture, but in times of drought it becomes so stiff as to be quite unworkable. It is sown with all varieties of crops, but the greater portion is devoted to rice cultivation. At the last settlement 51.9 per cent. of the land was classed as sawai, the highest proportions in individual parganas being 66 55 per cent. in Dhampur, 63 37 per cent. in Barhapura, and 60.76 per cent. in Nihtaur; and the lowest 28.9 per cent. in Bashta, 36.81 per cent. in Daranagar, and 38.4 per cent. in Chandpur. The matigar area averaged 20.8 per cent.; but the distribution is very uneven, ranging from 5.4 per cent. in Chandpur to 42.07 per cent. in Afzalgarh. The proportion is also high in the central and eastern uplands. and very low in all the western parganas. Of the sandy soils bhursawar accounted for 16 2 per cent., and bhur for 10.7 per cent. The former is most prevalent in Bashta, where it reaches over 24 per cent, and the latter in Daranagar, where nearly 35 per cent. of the area consists of sand; east of the Karula the amounts are quite insignificant, and there is no true bhur in the north and east of the district. The small remaining area, 4 per cent., is included in a special class known as bara. This is the highly manured land in the immediate vicinity of the village site, for which

secial rates were adopted; it corresponds to the gauhan or and of other districts, and is only used for the cultivation of ecial crops, such as opium and vegetables

The distribution of the various soils is very intimately con- Drainage. ected with the drainage system of the district, for the livers have marked influence upon the land on their banks. These rivers. hich are exceedingly numerous, belong to several systems or rather several subdivisions of the same system, as all the surface drainge ultimately finds its way through the various channels into the anges. On the whole, the natural lines of dramage serve their arpose admirably, and the rapid slope of the country from north south effectually prevents any serious interference There are, owever, a few places where the drainage is impeded, but such ostructions are nearly always attributable to the action of the vers themselves. Thus series of small swamps and marshes are to e found where the Ganges, Khoh and Ramganga have abandoned reir old channels, though in most cases the defect could be remedied y a simple system of drainage cuts in the respective rivers. The vamps of the Gauges khadir owe their origin to the same cause, ut being extensive and continuous, it is probable that more elabotte measures would be required. In the low central uplands there some danger of flooding along the Ban and its numerous channels 1 years of heavy rainfall, owing to the silting up of the bed and some cases to temporary irrigation dams. The crops in the immelate vicinity of the stream are in consequence precarious, but at the me time the higher lands remain so moist that in ordinary years o irrigation is required, and it is doubtful whether any meaires taken for the relief of the low ground, such as the deepening the channel or the prohibition of embankments, would comensate for the injury that would in all probability be done by epriving the more fertile uplands.

The Ganges is only a river of this district in the sense that forms the western boundary. It first touches Bijnor in the xtreme north, close to its point of exit from the hills above lardwar. Thence it flows southwards in a wide bed of oulders, the volume of the stream being greatly diminished y reason of the Ganges canal, which takes off at Mayapur on ne right bank. A short distance below this place the bed

Ganges rivei.

becomes sandy, and the alluvial deposit left by the annual floods makes its appearance on its banks, but the channel is comparatively shallow, and the river is not navigable till it reaches the vicinity of Nagal in pargana Najibabad. There it takes a wide sweep towards the south-east, maintaining this direction for several miles beyond the Balawali railway bridge, the only permanent structure over the river in this district. The Ganges bends southwards again at Banuwala in pargana Mandawar, and continues in a southerly or south-easterly course till it leaves the district at Kamharia, in the extreme south-west corner of pargana Bashta. In this portion of its length the channel varies from time to time, its present tendency being to shift eastwar 1s, to the great detriment of the Bijnor khadir as already mentioned. The level of the bank falls from 970 feet in the north to 687 feet in the south, so that the average fall is about 33 feet to the mile. The river is but little used as a highway, though it serves a useful purpose in carrying down the produce of the forests: there are no places of importance on its banks, with perhaps the exception of Daranagar, which stands on the raised cliff of the upland tract.

langes

The Ganges receives the waters of several tributaries during its course along the borders of the district, but few arc of any importance. Those in the extreme north are mere mountain torrents, of insignificant dimensions during the summer, but swelling into a boisterous rush of turbid water in the rains. The first is the Paili Rao, which drains a large area in the mountains of Garhwal and in this district skirts the Chandi hills, falling into the Ganges some two miles below Shampur. Its deeply worn banks and channel, the enormous boulders at has carried down, and the huge trees whose torn and mangled trunks line the cold weather bed, bear testimony to the violence of the current during the rains. Parallel to the Paili Rao, some four miles to the south-west, flows the Rawasan, which enters the district at Laldhang on the submontane road. This is a much less furious torrent and contains a larger supply throughout the year, being frequently used for irrigation in the upper part of its course. Of a similar character is the Kotawali, sometimes called merely by the generic term of Rao: it passes to the south of the

forest tract, past the old fort of Saiyidhhura, and joins the Ganges at Asafgarh, though that castle has long been swept away by the action of the stram. The next tributary is a small drainage channel in pargana Mandawar, known as the Lahpi. This has its origin at Eaifpur Khaddar, where it carries off the surface water from the uplands, and thence passes southwards underneath the high bank till it widens out into the broad marsh known as the Raoli jhil, shortly afterwards discharging into the Ganges. The stream was probably at first a mere backwater of the river, and in years of high flood receives much of the overflow from the Ganges in the north of the pargana; this action has been attended with much damage to the lowlands, as saturation has set in, and the fertile rice fields have been rendered sterile by the saline deposit known as reh.

A far more important tributary is the Malin, a perennial Mahn. river of some magnitude. It rises in the hills of Garhwal, entering this district in the north of pargana Najil alad, a short distance to the east of Haldukhata on the submontane road. At this point the stream flows in three distinct channels, that on the west being known as the Ratnal, and that on the east as the Riwarı. These rejoin the main stream after a course of several miles through the forest tract, the former effecting the junction close to Sahanpur, and the latter near Bhogpur above Najibabad. About three miles beyond the confluence the Malin enters pargana Knatour, flowing parallel to the railway on its northern side. Just as it approaches the boundary of Mandavar, it bends south to cross the railway, after having received on its right lank the waters of the Lakharhan, a small stream which rises in the forests of Najibal ad. The Lakhaihan itself is fed by several tributary drainage channels, of which the chief is the Sukha nala. Close to the railway crossing, about two miles below the junction with the Lakharhan, another small stream falls in the Malin near the village of Barampur. This is known as the Katra nala, and rises near Kashirampur in pargana Najibabad, thence flowing in an irregular course towards the south-west; just before its junction it is fed by an insignificant channel known as the In the remaining portion of its course through the parganas of Kiratpur and Bijnor the Malin receives no other

tributaries, excepting a large ravine which joins the river on the left bank some two miles to the north-west of Kiratpur. confluence with the Ganges takes place at Raoli on the borders of the Bijnor and Mandawar parganas Throughout its course the river flows in a broad and shallow valley, and except on the northern borders of the district, where the action of the river is often destructive, the cultivation on its banks is perhaps the finest in the district. The actual river bed is well defined, and within its limits the channel shifts from side to side under the action of the annual floods. A few ravines to be found in pargana Bijnor, but apart from these, the banks of the deep bed are no longer affected by the action of the river, and the whole valley is a continuous stretch of stable cultivation. The Malin is a river of some historical interest It has been tentatively identified with the Elineses mentioned about 300 B.C. by the Greek ambassador Megasthenes; while some 250 years later the poet Kalidasa immortalized the stream in his famous drama of Sakuntala. It was here that the king Dushyanta pursued an antelope to its refuge in the shrine of a hermit, and in the forests on the river bank the monarch first beheld his future queen.*

Chhoiya.

Below its junction with the Malin, the Ganges receives in this district but one other tributary of importance. This is the Chhoiya, a drainage channel of considerable length, which is dry for the greater part of the year. It takes its rise in pargana Najibabad, in the village of Samipur, some three miles west of the tahsil headquarters. Thence it flows in a south-westerly direction, skirting the southern boundary of the pargana and afterwards separating Kiratpur from Akharabad. It then crosses the centre of pargana Bijnor, afterwards forming the boundary of Daranagar for some miles, and subsequently traversing the western portion of the latter as far as its junction with the Ganges some two miles below Jahanabad. For the greater part of its course the land on the banks of the Chhoiya possesses a fertile clay soil, but in pargana Kiratpur and elsewhere ravines appear and the soil is dry and sandy. The only affluent of the

^{*}A translation of the play is to be found in the works of Sm W Jones, 1799, VI. see also Cunnagham's Ancient Geography of India, I, 313

Chhoiya is an insignificant stream known variously as the Paodhoi or Khalia, which drains a few villages in the west of Akbarabad and joins the main stream at Padla. There is another Paodhoi on the opposite bank, which has a course of some two miles and flows into the Chhoiya near Memon in pargana Kiratpur.

All the remaining rivers of the district are ultimately Ban. tributaries of the Ramganga. Several of them effect their junction with that river within the limits of this district, but those draining the central upland tract pass southwards into Moradabad and form a subsidiary system of their own. The first of these, beginning from the west, is the Ban, a small but perennial stream which effects the drainage of a considerable area. It originates in pargana Akbarabad, where three or four small watercourses unite and assume a definite channel. After dividing the pargana into two almost equal parts, the Ban traverses the south-western extremity of Nagina, and then roughly follows the boundaries of Bijnor and Daranagar on the west and Nihtaur on the east. A second channel, sometimes distinguished by the name of Banra, takes a parallel course a short distance to the east, the two uniting in the south of Nihtaur. On leaving that pargana the river then flows through the centre of largana Burhpur, and enters Moradabad near the village of Marahat. subsequently joining the Gangan in the Amroha tabsil. The Ban flows in a well-defined bed, from which it seldom wanders; but as a great part of its course traverses a lowlying tract of country, the river is apt to overflow its banks and do some damage by inundating the lands on either side: in places silt has accumulated in the channel, and elsewhere the stream is obstructed by embankments made for irrigation purposes. Though of insignificant dimensions in the hot and cold seasons, it swells during the rains into a torrent which is not only difficult, but dangerous to cross. Bridges have, however, been built over the river on all the principal roads.

The next river is the Gangan, which flows from north to Gangan. south through the centre of the district. It rises in the forests of Najibalad near the northern confines of the district, and flows

in a south-westerly course as far as the boundary of the pargana,

It then becomes a perennial stream, passing in a southerly direction through Akharaba I and Nagina, it afterwards forms the boundary between Nihtaur and Dhampin, thence flowing through the north-east corner of Burhpin and finally traversing the south of Seohara before its entry into Mora labad. The river has an extremely tortuous course, its total length within the district being 45 miles with a mear fall of four feet to the mile. The bed is well defined and deep throughout, and consequently it is seldom directly used for irrigation purposes, although the river is of considerable value in supplying a system of canals. Owing to the depth at which the channel lies below the surface of the country, the Gangan has but little influence on the land in its neighbourhood, and has seldom been known to overflow its banks, at the same time it very efficiently performs its duty as a dramage channel.

Gargan tribut-

The Gangan is fed by several tributaries, one or two of which are of considerable importance. The first of these is the Katheni, which rises in Najibabad near the old fort of Mondhaj, and joins the Gargan on the right bank close to the pargana 4 boundary. The second is the Pilkhala, an insignificant stream which at first separates Najibabad from Barhapura and then flows along the north-western borders of Nagina to join the river at Naqupur Bannauli It is crossed by a brilge on the railway at the village of Mirzapur. The Gangan has no other tributaries worthy of note in this district, but in Mora labal it receives the combined waters of the Karula and Ekra The former is a stream of much the same size as the Ban, and has its origin a few hun leel yards to the west of the Nagma railway station. After flowing through the parganas of Na ina and Dhampur at a very short distance to the east of the Gangan, it becomes for a few miles the frontier between Burhpar and Seohara; then turning towards the south-east through the latter pargana, it leaves the district at the village of Kiwar. Close to its exit it is joined by the Ekia, which rises to the north of Dhampur and maintains a southerly course throughout its length. The Ekra is fed by an insignificant stream known as the Bakal, which rises near Seohara; while there is a second Ekra which has its source near Alauddinpur in pargana Dhampur and

falls into the Karula near Nindru. The Karula is a useful drainage channel, and is also employed extensively for irrigation purposes, while the Ekra contains very little water except during the rains.

The next important river is the Khoh, which rises in the hills Khoh. of Garhwal and enters this district in the extreme north in the pargana Barhapura, at the point where the railway to Kotdwara crosses the submontane road. Passing southwards, the Khoh is joined at Jahanabad on its right bank by the Sukhrao, a hill torrent of considerable size, and thence it continues to the westein boundary of Barhapuia, separating that pargana from Nagina on the west. It afterwards turns slightly to the southeast, traversing pargana Dhampur, and eventually falling into the Ramganga near Rafatpur, in the southern angle of Afzalgarh, after a course of about 35 miles through this district. The Khoh is a river of very considerable dimensions, but as a large proportion of its water is drawn off into a canal as high up as Jahanabad, the stream only attains the depths of a few feet during the dry weather, and the bottom being generally firm, it is fordable in most places. After heavy rain it swells into a mighty torrent; but having a very wide bed its waters are quickly carried onwards, and the flood is of short duration. Though the channel is subject to constant changes, the variations are seldom extensive, and the land subject to fluvial action forms but a small portion of the wide valley. The deposit brought down by the river is of a very inferior character, consisting mainly of sand, the cultivation in the alluvial lands is of a poor description, and is generally carried on by tenants residing in the upper khadir. The Khoh receives no tributanes of any importance on its right bank besides the Sukhrao, though mention may perhaps be made of a small stream known as the Paodhoi, a name given to several watercourses of a similar nature in this district, which rises to the north of Nagina and flows past that town on the east, eventually joining the river at Ahmadnagar Gorwa in pargana Dhampur. On the opposite or left bank, however, it is joined by a number of small tributaries, many of which carried down the drainage from the outer hills and traverse the forest country in the north of Barhapura. One of the largest is the Sanch,

which joins the Khoh shortly after its entry into this district and then come many torrents, known generically by the name of Sot and distinguished from one another by that of some village through which each passes. Three of these torrents unite just to the south of Barhapura, and the combined stream which contains a perennial flow of water, is known as the Uni This flows in a somewhat variable course to join the Khoh near Islamabad on the road from Barhapura to Nagina; it does considerable damage to the villages in its path, and most of the cultivated estates adjoining the stream are treated as alluvia mahals. Several other small watercourses pass into the Kho in pargana Dhampur, the last being known as the Singhai, which has a short course through the lowlands to the west of the Ramganga and effects its junction with the Khoh close to the confluence of the two great rivers.

Ga titl Ramari ganga,

The Ramganga is a mountain-fed stream which rises in th upper ranges of Garhwal, and enters this district after a lon course through the hill country, near the village of Kalagarh o the submontane road. On that point it is already a considerab. river, liable in the rainy season to heavy floods which caus sudden and extensive changes in its bed, seriously affecting th villages in the lowlands of the valley. The channel itself : wide and deep, and owing to numerous quicksands the stream is only fordable in dry weather at a few recognised places. A first it flows almost due west, separating Barhapura from Afza garh, but near Pempui in the former pargana it turns southward into Afzalgarh, again meeting the boundary at Allahpr From that point it roughly follows the wester Mubarak. borders of Dhampur and Seohara, and finally passes int Moradabad near Sheikhpur Khaddar in the latter pargana. river is not navigable, but is employed during the rains for floating down large quantities of timber.

Ramganga tributaries. The chief tributary of the Ramganga on its right or wester bank is the Khoh, which has been already described. It als receives one or two small torrents in pargana Barhapura, an close to its exit from the district it is fed by an insignifican stream which rises near Seohara and is known as the Dungraiy nala. Its eastern affluents, on the other hand, are of considerable

size, and drain the greater portion of Afzalgarh. mainly rain torrents, swollen and impetuous for some three months of the year, and at other times dry beds of sand. The first is the Dhara, which rises in the outer hills and enters the district at Dharamandi on the submontane road, and flows westwards to unite with the Ramganga near Afzalgarh. Next comes the Banaili, which has a similar origin, and flows in a wide bed through the centre of the pargana in a south-westerly direction, effecting its junction with the larger river just within the confines of pargana Dhampur. A third is the Pili, which rises in the reserved forests of Rehar, and passes close to the town of that name, following a course almost parallel to that of the Banaili, and joining the Ramganga at Rafatpur, a short distance above the confluence with the Khoh. This stream carries a small volume of water all the year round, being fed by perpetual springs; its bed is deep and well defined, so that it affects but little the villages on its banks. Lastly comes the Phika, another hill stream which for many miles forms the boundary of the district, although in several places it passes into Naini Tal. It enters Afzalgarh for the last time in the extreme south of the pargana, and pours its waters into the Ramganga on the borders of the Moradabad district. The Phika is fed by one or two small streams, of which the most important is the Kotırao, rising in the hills and taking its name from a village on the submontane road; it passes through the Rehar forests for several miles, uniting with the larger river near Nabigarh. The others are mere drainage channels from the forests. such as the Khalia and the Jabda.

The numerous streams and the rapid slope of the country naturally militates against the formation of any large lakes. It is only in the *khadir* of the Ganges, and to a less extent in the central uplands, that any considerable reservoirs of water or depressions which collect the surface drainage can be found, and elsewhere they are practically non-existent. Of the *khadir* swamps the first to be noticed is one in pargana Najibabad, known as the Jhilmila *jhil*, which covers a considerable area in the low country to the north of the confluence of the Rawasan and Ganges. This lies in the forest tract, and is consequently

Lakes and

of little importance. The next is known as the Raoli jhil, and is the largest in the district. As has already been mentioned, this swamp lies underneath the uplands in pargana Mandawar, where the waters of the Lahpi widen out into a lake covering some 2.500 acres in the villages to the north of Raoli, the overflow passing into the Malin close to its junction with the Ganges. In former days the banks of this lake were extensively cultivated with the fine lice known as munn, but of late years the waters have risen owing to the overflow of the Ganges in the country further to the north; so that the soil has become saturated and the rice area has greatly contracted. Another line of swamps is to be found in the southern khadir, skirting the high bank in pargana Bashta. These, too, are rather injurious than otherwise in their effects, as a succession of wet years causes the waters to rise and hastens deterioration in a most precarious tract. None of the upland jhils calls for any special mention. In the Akbarabad and Kıratpur parganas there are several large depressions of considerable value for irrigation purposes and for the growth of rice, one of the chief being that to the east of Kıratpur itself. Similarly ın pargana Nagına there is a number of small ponds, but the only one deserving notice is that at Banwaripur on the road to Bijnor; and in the Bijnor pargana practically the only ghil is that near Barauki in the extreme north-east corner. Pargana Nihtaur contains several insignificant depressions, while in Dhampur there are a few large tanks in the upland portion alone, as for example those at Pipalsana, Jamalpur and Nindru, which are extensively employed for irrigating the land in their neighbourhood. So, too, in Seohara there are several shallow ghils, the principal being those at Mahupura, Dehra and Wazirpur.

Waste lands.

The district contains a very large area of waste land, if under this head be included both that returned as culturable waste and that classified as barren, these together amounting to 42.6 per cent. of the whole. Under these categories, however, comes an extensive area which should not properly be so described, inasmuch as they comprise not only forest land and groves, but current fallow, which is necessarily very large in the presence of so much sugarcane cultivation. Taking the barren

area alone, we find that for the five years ending in 1906 it averaged 128,559 acres or 11.2 per cent. of the whole district; but this again requires some qualification. No less than 43.7 per cent. is covered with water, either by rivers and canals or by lakes and ponds, and an additional 31.7 per cent. is occupied by village sites, buildings, roads and the like. This leaves only 31,666 acres or 28 per cent. of the entire district as actually unfit The proportion is indeed extremely small, for cultivation. though it is probable that much of such land differs but little, if at all, from much of that recorded as culturable waste. parganas the area is quite insignificant, and large expanses of barron land are only to be found in those tracts which border on the Ganges and the other great rivers, the banks of which are lined by stretches of sterile sand. One-fifth of the whole amount is confined to pargana Mandawar, and next to this come Dhampur, Najibabad, Afzalgarh and Daranagar, in each of which somewhat similar conditions prevail. There is a certain amount of actually barren sand in the high uplands of the western parganas, but in the central tract the unculturable area is extremely small, and in Nihtaur, Chandpur and Buihpur it does not exceed two hundred acres in any case. The looseness of the classification is clearly illustrated by the fact that of late years there has been a large decrease in the barren area owing to the extension of cultivation—a result which would have been impossible had the land so described been really unfit for tillage. In 1865 it amounted to no less than 64,800 acres, and even in 1895 the area recorded under this head was 51 196 acres.

The forests of Bijnor fall into two main divisions, the one comprising the Government reserves, and the other those which are owned by private zamindars. The former have a total area of 63,884 acres, of which 45,802 a res belong to pargai a Najibabad and the remainder to Afzalgarh. The Afzalgarh forests, together with the adjoining tract of Garbibulchand in the Naini Tal district, form part of the Garbial forest division, while those of Najibabad are included in the Ganges division, both being comprised in the western circle of the United Provinces. A small portion of the Najibabad forests, however, is not under the management of the Forest department, but is still controlled

Reserved forsets.

by the collector of the district. This comprises an area of 3,818 acres in pargana Najibabad, and goes by the name of the Amsot and Mohanwali reserves. This area is of small economic value, and is worked on a system of leases to contractors.

Ganges division.

The forests of the Ganges division in pargana Najibabal cover an area of 41,984 acres, including the Chandi range of 33,931 acres; the islands of the Gang's, 5,588 acros in extent; and a small portion in the extreme north, known as the Hazara block of the Ghori range, with an area of 2,465 acres. Hazara is divided into two compartments, in one of which the soil is hilly, with a northerly aspect and stony and sandy soil, overlying a deep bed of boulders, while further west the surface is nearly flat, though broken by ravines, and the soil is a dry and shallow layer of sand. In the former the crop consists mainly of sal (Shorea robusta), but the trees are at present young and of small growth, there is also an abundance of bamboos, which constitutes the most valuable product of these forests. In the western compartment miscellaneous species of all ages are to be found, with a small proportion of young sal. The soil is very similar in the Ganges islands, but a large area is flooded annually by the river and bare of tree-growth; in other cases the islands are well wooded with shisham (Dalbergia sissoo). khair (Acucia calechu), and other spicies. The Chandi range is subdivided into five blocks, of which those known as Chandi. Shampur and Khara together occupy 19,544 acres and include the hilly area, with a shallow soil of sand or clay, frequently exposing the underlying sandstone. Here there is little reproduction, and much of the ground is bare or only holds a poor scrub growth. There is a fair proportion of young sal in the north, but the quality is poor, while in the ravines some good patches of shisham are to be found, and in many places there is a luxuriant growth of valuable bamboos. In the remaining blocks, known as Paili and Nalonwala, the ground is for the most part flat, and the soil is a deep deposit of sandy alluvium. Along the Pauli river there is a fair growth of young shisham and khair, but elsewhere the forest consists mainly of mixed trees of no importance, bamboo thickets, tangled scrub, and open grass plains.

These forests have come gradually under the management of Managethe Forest department in much the same manner as those of Kumaun and Garhwal. At first they were worked on a simple system of contracts and leases, with the result that much loss was caused to Government both in money and in damage done to the forest estate. In 1853 the old leases were bought up and the tract taken under direct management, Chandi being entrusted to the collector of Bijnor. In 1867 an alea of 30,000 acres was leased to the canal foundry and workshops at Roorkee for the supply of fuel and charcoal, the remainder being managed by the collector, as before, and given in annual leases to various contractors on behalf of the Forest department. It was not till 1879 that the forests of the Garhwal division were reserved, while Chandi was made over to the departmental officers in 1880 and 1882.* Since that time the forests have improved, but many years must elapse before they are capable of producing timber of marketable value. A working-plan was drawn up by Mr. F. B. Bryant in 1895 for a period of 36 years, but according to this no regular fellings are prescribed for the Chandi circle, except in the case of bamboos. The object of reservation is to ensure reproduction by means of closing the forests to grazing and establishing fire protection. The measure has been successful in the northern half of the range, as the sal tree has established itself over a large area, and the tract generally has become covered with jungle. The southern portion is still open to grazing, and a considerable sum is derived from this source, large herds of cattle resorting hither from Bijnor and Saharanpui. The bamboo areas are cut over every other year, while other sources of income consist in dry wood for fuel and bhabar grass, which are exported annually. The southern and western portion, in which grazing is allowed, is not protected against fire; but in the north there is a regular system of fire lines, which has been gradually introduced since 1888. The chief markets for forest produce are those of Hardwar and Najibabad, both of which have the advantage of railway communication. The Hazara block of the Gohri range is worked on a system of improvement fellings, to take place once in twenty years; while in the Ganges

^{*} G O, Nos. 754-55 of 14th July 1880 and G O. No. 400 of 10th June 1882.

islands clean coppies felling; are prescribed to the extent of 65 acres annually. The forests throughout this district are free from rights, but in 1898 a concession of occupancy was granted at a nominal rent to the servants of the three temples situated on the heights opposite Hardwar. For administrative purposes Chandi forms a separate range, while Hazara and the islands are included in the Gohri; the former is in the charge of a forester and five forest guards. The headquarters of the range is at Parli, where there is a forest rest-house.

Gai hwal division

The Rehar reserved forest is situated in the north-east corner of pargana Afzalgarh, and like the adjacent forests in the plains portion of the Nami Tal district is worked on a different system from that of the hill tracts of the Garhwal division. Formerly the area was managed by the collector of Bijnor, and was leased out to the zamındars, whose cultivation lay in the vicinity, dues being exacted on various articles of forest produce. In 1862 Rehar was formally declared Government property, but apparently the forest was not considered valuable, as in the following year it was included in waste lands, and advertised for sale under the waste land rules. It was again, however, set aside as Government forest in 1865, and its sale prohibited, the tract being united with Chandi to form the Bijnor forest division; while in 1879 it was declared reserved forest and handed over to the departmental authorities.* When taken over, the forest contained but little good timber, and at first it was merely protected, the exports consisting only of dry trees and minor produce. In 1888 a working-plan treating the forest by the method of coppice under standards was sanctioned for five years, but it was found impossible to work up to the provisions of the plan, owing to the difficulty of extending operations to be carried out by purchasers over so large an area and of disposing of the produce In 1893 Rehar was incorporated with Garhibulchand in Naini Tal, and a single working-plan was drawn up by Mr. Bryant, prescribing improvement fellings spread over a period of twenty years The forest is greatly superior in quality to that of Chandi, half of the area being covered by sal of a

^{*} Notifications No. 147F of 21st February 1879, No 100 of 10th July 1886, and No. 4 of 3rd April 1890.

high class, while the test is either open grass plains or occupied by sal poles and trees of miscellaneous species. The total area of the forest as originally reserved was 16,644 acres, but to this an addition was made of 1,438 acres from the village of Amangarh in April 1905. It is in charge of a ranger, whose headquarters are at Amangarh on the southern boundary: there are rest-houses and revenue chaukis at Amangarh and Jhirna, and the latter are also maintained at Rehar, Lalpuri and Patta. forest is protected by a complete system of fire lines, which also serve a useful purpose as roads for exporting produce. The latter consists for the most part in poles of sal and other trees. dry wood for fuel, and bhabar grass. The market is purely local, the trade being largely in the hands of jogas or persons who carry timber on buffaloes to Afzalgarh, Barhapura and thence to the railway: a certain proportion goes eastwards to Ramnagar. and this route will grow in popularity with the completion of the railway to Moradahad. The timber takes the form of poles or of billets roughly shaped with the axe and known as gaulus

The income derived from the reserved forests is but small. Forest and is obtained chiefly from the sale of bamboos and grass in the Chandi range, and from sal poles in Rehar. The total varies from year to year, but averages about Rs 20,000, or double the sum realised at the time when the forests were under the control of the district authorities. The amount will doubtless be increased in future years, when regular selection fellings become possible with the improvement of the stock

The forest area outside the Government reserves is of little Puvate value from a sylvicultural point of view, but of great importance as a fuel and fodder reserve, and also for the supply of bamboos, which in many places grow luxuriantly. The chief proprietor in the foiest area is the Raja of Kashipur, who holds 46,950 acres of such land in Afzalgaih and Barhapura, stretching southwards from the submontane road, beyond which are other reserved forests of the Ganges division. In all the forest tract there are stretches of tree jungle, interspersed with grassy plains, which bring in large sums to the owners by way of grazing dues. In some places the landlords demand as much as five supecs for each buffalo, and proportionately smaller

amounts for other cattle, the due being known as puchli or so much per tail. The trees are sal, though this is comparatively scarce, semal (Bombax malabaricum), dhak (Buteu frondosu), sain, asna or asaina (Terminalia tomentosa), tendu or chony (Diospuros ebenum), haldy (Ading cordifolia), and many other species found throughout the plains. Of the last the most valuable perhaps is the shisham, which occurs in fair quantities and is always in demand. Besides that of the Raja of Kashipur, there is a second large estate, situated to the north of Naubabad and comprising about 114 square miles, the property of the Jats of Sahanpur. Of late years this area has undergone extensive reclamation, and the cultivation has spread in every direction. This measure, which owes its origin in great measure to the action of the Court of Wards, has naturally resulted in a gradual decline in the income derived from the sale of forest produce; but the receipts from grazing fees still constitute an unportant asset. few villages belong to the Chaudhris of Haldaur, having in former days been leased to them by Government.

Groves.

It is almost invariably the case that districts which possess a large area of forest are comparatively deficient in artificial groves, and Bijnor forms no exception to this rule. The existence of an abundant natural supply renders the plantation of timber trees unnecessary, and this fact is illustrated by the comparative absence of groves in the forest parganas of the north, the southern tracts, which have less ready access to the forests, exhibiting far higher proportions of grove land. Groves are not, however, commonly planted for the timber they may produce in the future, but rather for the enjoyment of the fruit. or for sentimental or ornamental reasons. Small as is the area in comparison with the districts of southern Oudh, for example, the mango groves of Bijnor are famous: the tree grows with great luxuriance, and its fruit attains considerable perfection. Several of the large landowners devote much money and attention to their groves, and in the open country they are never out of sight. while in several instances they are of large size. In 1865 the total grove area was 14,605 acres, and even then it was observed that there had been a considerable decrease of late years, and that the ancient superstition which forbade the destruction of

groves had almost disappeared, owing to the greater demand for timber and the enhanced value of the land for agricultural purposes. In 1895 the total area had fallen to 11,707 acres, and since that time there has been a further decrease, the average for the five years ending in 1906 being but 11,556 acres or 1.07 of the entire district. The proportion rises to 1.9 per cent. in pargana Chandpur, and is almost equally high in Nihtaur, while Bijnor, Daranagar, Nagina and Kiratpur show figures well above the average. On the other hand, it is only (.5) per cent. in the forest tracts of Najibabad, Barhapura and Afzalgarh, and little more in Mandawar and Baslita, where the physical conditions are unfavourable to tree-growth. It is possible that the decline is more apparent than real, for a constantly-increasing area of grove land is being brought under tillage and is now classed as cultivated, although the trees remain. Though for the most part the groves consist of mangoes, other varieties of fruit trees are far from uncommon, especially the jaman, bel, ber and tamarınd. In the neighbourhood of the towns and elsewhere many orchards are to be seen, and these contain oranges, citrons, limes, lemons, loquats, pomegranates and peaches, all of which yield fruit of good quality, though perhaps not equal to that of Saharanpur. The common trees of the country need not be enumerated, as they are by no means peculiar to Bijnor, almost all the varieties being found here which grow in these provinces generally. The common mulberry (Morus nigra) is abundant, but has never been utilised for silkworm culture: an attempt was made to introduce this industry by Major White, who in 1861 planted a number of silkworm mulberry tiees (Morus alba) at Bijnor; but though the experiment proved successful, nothing further was done in this connection.

The mineral products of the district are extremely meagre. Minerals, The soft sandstone found in the low hills to the north is of no use for building purposes, nor are there traces of any quarries worked in ancient days. Boulders of limestone occur in the torrent beds, but these are seldom put to any use. The saline efflorescences known as reh, which make their appearances in the saturated tracts of the khadir and elsewhere, are employed to some extent for the manufacture of crude country glass, to which

some reference will be made later. The nodular limestone known as kunkur is very rare, and to this fact may be ascribed the reason that the district is so poor in metalled roads. In fact the only place in the district where kunkur is to be found is at Sakdalpur in pargana Bashta, and even this is of very inferior quality, as the quarry here is practically exhausted. Formerly such kankar as was required was obtained on the banks of the Solam river in Muzaffarnagar, and floated down to Bijnor during the rains; but now all that is needed for Government purposes is imported from the Bilari quarry in Moradabad, which yields a very superior quality and for some years past has supplied not only Bijnor, but also the Moradabal district and the Rampui State. importation is high, especially to places off the railway, for while the rate is Rs. 12-2-0 per hundred cubic feet at Nagina, it uses to Rs. 21-2-0 at Bijnor, the rate of cart transport being eight annas per mile. Lime is obtained by burning kunkar, or else imported from Dehia Dun and Haidwar.

Building (materials.

Among other building materials the most important are bricks, which are manufactured after the European methol at Bijnor, Najibabad an l, if occasion so deman ls, at other places. Suitable clay is to be found in most parts of the district, so that there is no difficulty in obtaining bricks for the erection of pukka houses. Those of the standard pattern, measuring $9'' \times 4\frac{1}{2}'' \times 3''$, are made in three qualities, costing respectively Rs. 9-8-0, Rs. 7-8-0 and Rs. 4-8-0 per thousand, while if merely sundried and unbaked the price is Re. 1-4-0 for the same quantity. Bricks of the native pattern, measuring $7'' \times 3\frac{1}{2}'' \times 1\frac{1}{2}''$, are to be had at all the principal towns of the district, the average cost being Rs. 4 per thousand. Stone is never employed in private buildings, and that required by the Public Works department has to be imported from Agra. Iron work is obtainable locally, except in the case of girders and corrugated sheets for roofing; but there is no demand for these by private persons, as they prefer building their houses in their own way with sal beams and mud roofs. The forests yield an abundance of timber for such purposes, the average rate for scantlings of sal being Rs. 3-4-0 per cubic foot. of asna Rs. 2-8-0, and of inferior species from Re. 1 to Re. 1-8-0, these charges including the cost of labour. The ordinary mud-

built house with rafters of mango and country tiles or a flat mud can be built at a price ranging from Rs. 400 to Rs. 600, while with a thatched roof, such as is usually inhabited by tenants, the cost is from Rs. 80 to Rs. 100. Where bricks are employed, the amount is very much greater; an ordinary pakka house measuring 50 by 60 feet involves an expenditure of about Rs 2,500, the charge being proportionately greater if lime mortar and superior timber be employed.

The wild animals of the district are more varied and numer- Fauna. ous than in any other part of Rohilkhand, excepting perhaps Pilibhit, though of late years a marked effect has been produced by the contraction of the forest area. Wild elephants, which once used to extend their wanderings as far as the swamps of Bashta, now penetrate no further than the northern woodlands, which they visit in large heids during the rains, ietuining at the close of that season to the lower ranges of the hills. Periodically kheddah - corrations are undertaken for their capture, but the number thus secured in Bijnor is but small. Tigers are occasionally to be found in the reserved forests, but the district no longer enjoys the reputation it once possessed for its shooting. Leopards are fairly common, and the sloth-bear is occasionally met with, both in Rehar and Chandi, while other carnivorous animals include the hyæna, wolf, and wild dog in the forest tract and the jackal and fox throughout the district. The usual rewards are given for the destruction of wild beasts, but the amount thus disbursed is insignificant, and never exceeds Rs. 200 annually. The loss of life, whether of human beings or cattle, caused by wild animals is remarkably small, considering the immense herds which are taken every year to the pastures of the forest tract. These are, however, protected during the night, by penning them in enclosures known as khatas as in the Naim Tal Tarai. Wild pig are very common both in the northern jungles and also in the open plains, wherever ravines, tall grass and sugarcane are plentiful. Of the deer tribe the sambhur or jarau (Rusa aristotelis) is met with in small numbers in the forests of Chandi and Rehar, generally preferring the hill country; the chital or spotted deer (Axis maculatus) is far more common, and is found throughout the northern half of the district; the kakar or barking-deer (Cervulus aureus) sometimes

descends into this district from the outer hills; and the parka or heydeer (Acts porcenus) is fairly plentiful, not only in the grass lands of the jungle belt, but also in the high grass of the Ganges khoder. In former days the gond or swamp-deer was a resident of this district, but is now extinct, and practically the same may be said of the four-horned antelops. The nelgar (Portux preius) is unexpectedly rare, but sometimes occurs in the woodlands, while the common antelops or black-buck is distributed all over the district, though in rapidly decreasing numbers. Nothing need be said of the reptiles, save that the Ganges abound in crocodiles and ghariyals, and that snakes are common everywhere, especially the cobra and karad. The number of deaths caused by snakebite every year is very considerable, and probably much greater than that shown in the official returns; snakes are most abundant in the forest tracts, but there are no rewards for their destruction except in the municipalities.

Bnds.

The birds of Bijnor call for little mention, as for the most part the same species occur as are found in Meerut and the other plain districts of these provinces. Peafowl and jungle-fowl occur in large numbers in the forests; black partridge are fairly common, especially in the Ganges khadar, where florican are to be seen from time to time; the san l-grouse occurs in small flocks on the more bare and sandy tracts of the district; the grey partridge may be met with everywhere, and so may the quail in its season. The comparative absence of lakes renders the numbers of wildfowl comparatively small, but during the cold weather the Raoli jhil and other swamps are full of wild geese, duck, teal, and other species. Snipe seldom visit the district in large numbers, and are always confined to a few localities.

Fish.

The fisheries of the district are of no great importance, being confined to the larger streams and tanks, in which the usual varieties common to the plains are caught by the ordinary native methods, nots of different descriptions and wicker traps being usually employed. The number of persons solely dependent on fishing was 2,200 at the last census, and though this is considerably higher than the general average for the provinces, it leaves out of account a far greater number comprising those who resort to fishing as a subsidiary means of existence. Fish are used as

an article of food by almost every class of the population, and are chiefly caught by Musalmans, Kahars and Mallahs. Good mahseer fishing is obtainable in the upper reaches of the Ganges, particularly above Shishamwala ferry, but the season is very short, lasting practically for only two months, from the 15th of February to the middle of April. The water then becomes cold again with the melting of the snows, and the mahseer no longer rises freely: a little more good fishing may perhaps be obtained in October when the rains have closed and the water is still unchilled by the The Ramganga, on the other hand, is not affected cold weather. in the same manner; and in this liver, for several miles below Kalagaih, mahseer may be taken from February till the advent of the rains, though the fish do not here attain a great size, seldom exceeding 15lbs.

The domestic animals of Bijnor are usually of a higher stamp Cattle. than those found in the districts to the south. This results from the presence of large grazing areas and the abundance of pasture; but there are no special breeds of cattle, nor have any attempts been made to preserve any particular strain. bullocks are usally small and compact, but are capable of great endurance and have a somewhat high reputation in other districts. The cost of an average bullock for ploughing purposes ranges from Rs. 30 to Rs. 50, while those employed for draught generally cost over Rs 100 each; a cow can be obtained at any price between Rs. 15 and Rs. 35, depending on the amount of milk given, while a cow-buffalo fetches about twice as much. A complete enumeration of the animals kept in the district was first made at the stock census of August 1899, and then there were 193,144 bulls and bullocks, and 16 332 male buffaloes, giving a total of 209,476 plough-cattle, or 2.82 to each plough. The latter figure was unusually high, the provincial average being 2.38, and was in fact only exceeded in Saharanpur and Mirzapur, both of which also contain extensive jungle areas. A second consus was taken in January 1904, and it was then ascertained that the number of bulls and bullocks had risen to 210,445, and these, together with 16,010 male buffaloes, gave an average of 2.73 per plough, which, though lower than before, is still sufficiently high. The number of cows also is remarkably large, for at the last enumeration there

were 130,138 cows and 39,383 cow-buffaloes, as well as 164,544 animals classed as young stock. These figures denote not only a considerable amount of breeding, but also point to the existence of an extensive and valuable ghi industry. Reference has already been made to the large sums derived in the forests from grazing dues, and it is calculated that the number of cattle sent thither for pasture averages about 75,000 head annually.

Horses.

At the last census the district contained 8,848 horses and ponies, and 1,439 mules. There is very little horse-breeding in Bijnor as compared with the district beyond the Ganges to the west, and the few gool horses to be seen are in the possession of the leading zamindurs, who obtain them either from the Nauchands fair in Meerut or from Batesar in the Agra district. There are two Arab stallions maintained by Government at Yusufa in the extreme south of pargana Burhpur, while the Chaudhri of Haldaur also keeps one for his own mares At the Yusufa stud there are two donkey stallions for breeding mules, the mares being owned by the Gujars of the neighbouring villages Mule-breeding is carried on elsewhere by a Banjara in pargana Mandawar, and by the Langra Faques in Afzalgarh and the lowlying portions of pargana Dhampur. These people make a considerable profit out of the business, as the owner of the stallions takes half the price realised for the mules. The latter are sold at the Nauchandi fair and fetch from Rs. 80 to Rs. 100 apiece.

Other animals.

In 1904 there were 62,080 sheep and 56,805 goats in the disrict. The former are unusually numerous, and are kept for their wool, for food and for penning on the land. Goats, on the other hand, are remarkably scarce, as is also the case in the neighbouring districts to the west. A sheep costs on an average Rs. 3, and a she-goat fetches from Rs. 4 to Rs. 6, according to the yield of milk. There are but few camels, these animals being generally unsuitable to the climatic conditions and the nature of the country. Transport is effected to some extent by pack-bullocks and buffaloes, but far more commonly by carts. The latter numbered 39,400 at the last stock census—a figure which is only exceeded in the adjoining district of Moradabad.

Cattle disease, The district is not often visited by severe epidemics of cattle disease. As is generally the case, the returns are unreliable and

the diagnosis is frequently incorrect; but as a rule the most _evalent forms are foot and mouth disease and rinderpest. Both assume their greatest intensity during the rains, but the former is seldom fatal, and the latter, though more destructive, has been comparatively rare of late years. Isolated cases of anthrax are reported from time to time, while hæmori hagic septicæmia, which is so common in the central and eastern submontane tracis, is here almost unknown. For the prevention of castle disease three veterinary assistants are attached to the district, and good work has been done in promoting inoculation, which at first was viewed with disfavour, but is gradually growing in popularity as its benefits are appreciated.

Owing to its geographical position. Bijnor enjoys a climate Climate. which is probably superior to that of any distinct in the United Provinces, excepting Dehra Dun and the hill tracts of the Kumaun division. The comparatively high latitude, coinlined with the proximity of the Himalayas and the presence of the many hill streams, render the district at the same time most and cool, while the general prevalence of cand in the soil, the slope of the country, and an a lequate d samage system message it from that excessive dampness which ust ally characterises the submonta is tracts. As a rule, the district is key out the influence of the east winds, and in the not weather the west winds seldom blow with any violence. The period of tigh temperatures is much shorter than in the districts to the south, and does not begin till the second half of April. In the summa morths of May and June the thermometer shows a markel 1182, but the heat expensensed in Bijnor is very different from that of Agra or even Lucknow. No regular theirmometrical observations are now taken in the district, but the records of former years show that on an average the maximum shade temperature in May does not exceed 99°, and in June it is not more than 96° F. Higher records have no doubt been experienced, but anything over 102° is certainly abnormal. The cold weather begins in October and lasts for six months, reaching its chimax in the beginning of anuary. Frosts are not uncommon, but they are rarely of any severity or cause any great damage to the crops The winter rains, which are known as the me hawat and take the form of all

storms, are a regular feature in this district, as throughout Rohil-khand; they are sometimes accompanied by hail, though the injury thus caused is never serious.

Rainfall.

Records of the rainfall for the four reporting stations of Bijnor, Nagma, Dhampur and Najibabad are extant from 1861 onwards, and those of Bijnor alone for three years earlier. The average annual fall for the whole district from 1864 to 1906 was 43 84 inches—a figure which is much in excess of that recorded in the neighbouring districts of the plants. The nearest approach to this amount is obtained in Moradabad, which is merely the southern continuation of the same tract of the country; but in the districts beyond the Ganges to the west the fall is very much smaller, the deficiency in Meerut amounting to fully 16 inches. There is a considerable variation between the returns of the different stations within the district, the amount increasing towards the north and east. Thus while Najibabad records an average of 46.78 inches, the figure drops to 45.21 for Nagina and to 43 S1 for Dhampur, while at the district headquarters, which lies further to the west, the average is no more than 39.02 inches. The phenomenon is readily explicable as being due to the influence of the hills and the forests, and it is probable that in the extreme north along the Garhwal border, the precipitation is considerably larger than even that of Najibabad. important as the amount of the rainfall is its regularity. whole period of 42 years there have been only five occasions in which the deficit was abnormal, that is to say, exceeding 25 per cent., and on an equal number of occasions has a similar excess been recorded. The minimum total in any single year was 19.65 inches in 1877, Bijnor on that occasion receiving 163 inches. This resulted in a famine of some intensity, as will be noticed hereafter, but the deficiency on this occasion was quite extraordinary, and the nearest approach to this figure is to be found in the 25.44 inches of 1899, when the district was but slightly affected. other short years were 1886 with 3268 inches, a defect of little moment; 1868 with 27.25 inches, this being a dry year throughout the provinces; and 1883 with 27.72 inches. On the other hand, the wettest year on record was 1894, when all previous observations were surpassed throughout the United Provinces.

average for the district was then 67.85 inches, but the distribution was remarkably uneven, as Bijnor reported less than 45 and Nagına, a comparatively short distance to the east, over 83 inches. This total was somewhat closely approached in 1880, when 63 25 inches were registered for the district as a whole, and on this occasion again Bijnor was but slightly in excess of the normal, though the other tahsils reported very similar figures. The other unusually wet years were 1870 with 58 25 inches, 1871 with 58 95 inches and 1893 with 60 inches. These amounts are of course very great, and in such wet years the drainage system of the district is taxed to the utmost. Reference has already been made to this subject, and it has been seen that on the whole little damage results from excessive rainfall, and that the injury is confined to the depressions in the central uplands and the valleys of the larger rivers. It is of interest to note that the largest amount of rain received in any tahsil in a single year was 86.7 inches at Najibabad in 1872. High as this figure is, it has been surpassed on one or two occasions in other districts of the plains, notably at Gonda and at two tahsils of Basti in 1894. Bijnor, however, holds the Indian record for the heaviest fall in a day, for a phenomenal storm on the 18th of September 1880 gave 324 inches at Nagina. 30.4 at Dhampur, and 28 5 inches at Najibabad within 24 hours.

The abundance of the rainfall, taken in combination with the Health. presence of large forest areas, has a marked effect on the salubrity of the climate, for in the north and east, both during and for some time after the rains, the country is most unhealthy, and in the centre of the district and in the numerous river valleys malarial fevers are extremely prevalent. Outside the forest area, however, the health of the district is good, and the vital and medical statistics of Bijnor admit of a favourable comparison with those of other parts of Rohilkhand and the United Provinces generally. Statements of Linths and deaths for each year from 1891 onwards are to be found in the appendix; returns are extant from a much earlier period, but it is beyond dispute that in former days the statistics were at least open to suspicion.* From 1871 to 1880 the average death-rate, calculated on the somehat unreliable figures of the 1872 census, was 30.63 per millo:

^{*} Appendix, Table III.

but in the second half of this decade, when a more accurate system of registration had been introduced, the average had risen to 35.15, which is probably much nearer to the actual condition of affairs, though the rate was no doubt affected adversely by the exceptional mortality that occurred during the famine year of From 1881 to 1890 the average death-rate per thousand of the population was 325; the period was one of generally normal rainfall, and was characterised by few epidemics of any magnitude, while the general prosperity of the district is further illustrated by the high birth-rate, which averaged 41.36 per mille. During the next ten years the death-rate rose to 3584, the increase being mainly due to the enhanced mortality from fever in 1894, and also in some small measure to the scarcity of 1897. The latter year was remarkable for the low proportion of births, and though a great improvement was observed towards the end of the period, the average for the decade was only 40.6. During the last five years, from 1901 to 1905, the mean annual death-rate has been 39 19 and the birth-rate 50 85 per mille, and if these figures are maintained, a very large increase of the population may confidently be expected at the next census. Recently the advent of plague has contributed materially towards an enhanced deathrate, but as yet this new factor has had no retarding influence on births.

Fever.

Another table given in the appendix shows the number of deaths recorded during the last fifteen years from the principal forms of disease. As is everywhere the case, fever occupies a predominant position, but the returns under this head are admittedly the most unreliable. No doubt in a very large number of instances makerial fever is the proximate cause of death, but it very often happens that the diagnosis is both incomplete and inaccurate, and it may be assumed that a large proportion of the mortality returned under the head of fever results from diseases such as influenza and pneumonia, in which fever is merely a symptom. Generally speaking it may be said that the higher the proportion of deaths from fever to the total mortality, the better the health of the district generally, the reason for this apparently anomalous condition being that when the percentage of death from fever is

low, there is probably a severe epidemic of cholera or small-pox. The truth of this is borne out by an examination of the returns. From 1871 to 1880 fever accounted for only 55 per cent. of the recorded deaths, while throughout that period small-pox wrought havoc in the district, and in several years there were serious outbreaks of cholera. Between 1881 and 1890 the percentage assigned to fever rose to 73 it would have been much higher but for the occurrence of an exceptionally severe outbreak of small-pox in 1883, in which year only 50 per cent of the deaths were ascribed to fever. During the succeeding decade over 83 per cent. of the deaths were returned as due to faver, and only in 1897 was the proportion much lower, that year being marked by another virulent epidemic of small-pox.

The district has never been free from choicia, although the Cholcia. mortality from this cause seldom assumes alarming proportions. The disease appears to be almost endemic, and its prevention is rendered especially difficult by the impossibility of a lequately protecting the water-supplies The water level is generally so high in the wells that their contamination is rendered peculiarly easy, as is the case in all submontane districts. The proximity of Hardwar is another source of dauger, as the disease has frequently been traced to the great religious gatherings at that place, and when an outbreak occurs at these fairs, the dissemination of cholera over the adjacent country follows very rapidly. In the district itself the place most commonly infected by cholera is Nagina, which has on many occasions been the starting-point of epidemics. The statistical history of the disease is somewhat remarkable. From 1871 to 1880 the average annual number of deaths from this cause was 316, or 1.4 per cent of the total mortality. The only epidemic of any intensity was that of 1878, when the death-rate from all causes was abnormally high and 1,300 persons were carried off by cholera From 1881 to 1889 inclusive the disease almost vanished: there was nothing approaching an opidemic, and barely ten deaths were recorded annually. In 1890. however, a serious outbreak occurred, the mortality reaching to 1,570, and since that time the average has risen to a surprising extent. There was a widespread epidemic in 1892, when 1,767 deaths were registered; but apart from this there were no years of

exceptional mortality, though the disease was always more or less prevalent. For the ten years ending in 1900 cholera accounted for some 530 deaths annually or nearly two per cent. of the recorded total, and on only three occasions was the number less than one hundred. During the last five years the average has somewhat declined, but has remained fairly constant, amounting to 285 deaths per annum. There is no perceptible relation between cholera and the rainfall, and its prevalence must apparently be ascribed to other, and possibly accidental, causes.

Smallpox.

In former days the district was constantly exposed to the rayages of small-pox, but of late years the mortality has steadily declined, though periodical epidemics of great intensity continue to visit the district. The returns, so far as they are of any value, show that from 1871 to 1880 some 1,460 deaths occurred annually from this cause, the worst epidemics being those of 1876 and 1878. more than 4,000 persons being carried off in the former year. During the next decade the average dropped to 906 per annum, and this figure would have been very much less but for the alarming outbreak of 1883, when the mortality reached nearly 3,500. The ensuing ten years saw a striking improvement, for the average was only 494, while if 1897 be excluded, the total falls to less than 90 persons. In the year in question the disease raged throughout the district, the number of deaths registered under this head being no less than 4,222, whereas two years earlier the district had been entirely free, for the first time within the memory of man. After this great visitation Bijnor remained almost immune, but in 1903 and the following year small-pox once more appeared, and more than a thousand persons died from the disease. Such occurrences may, however, now be regarded as exceptional, and this result is to be attributed solely to the spread of vaccination. In old days the practice of inoculation was fairly common, but not sufficiently so to protect the people in any way against epidemics. Vaccination through the agency of Government was not introduced till after the mutiny, and at first made very little progress. By 1870 it was already observed that the number of persons willing to submit themselves to treatment was yearly increasing, and the immunity of those who had consented to undergo this operation contributed materially to the readiness

with which the people came forward, and especially so at a time when small-pox was rife throughout the district. Between 1871 and 1880 more than 228,000 persons were vaccinated, or nearly one-third of the total population. The comparative absence of the disease during the next ten years naturally caused a decline, but the epidemic at the end of the period brought up the figures again, the total for the decade being 229,600. The rate of progress was steadily maintained from 1891 to 1900, the annual average rising to 23,785. At the present time the number is still larger, the average for the last five years being 25,900. According to the latest report, the proportion of the population protected by vaccination in 1905-06 and the six preceding years is nearly 23 per cent. of the whole, this figure being well above the general average for the provinces. Vaccination is carried out by a staff of one assistant superintendent and 17 vaccinators, under the control of the civil surgeon. The cost amounts to some Rs. 2.500 annually and is mainly borne by provincial funds, the balance being contributed by the district board and the municipalities. The Vaccination Act is in force in the latter, and there vaccination is compulsory.

Other diseases call for very little comment. The most prevalent are bowel complaints, especially dysentery, these being in most cases the result of malarial fever. Afflictions of the eve are very common, and may be traced to various causes, of which the most important are malaria and small-pox. A large number of cases of goitre come up for treatment in the local dispensaries, especially in the north and east of the district. There is a widespread popular belief, not only in Bijnor but in all the submontane trasts, that the disease is brought on by drinking snow-fed water. It is undoubtedly the case that goitre is most common along the banks of the great rivers, and especially in comparative proximity to the mountains; but it has not been determined whether this theory has any foundation in fact. The table referred to above gives the annual mortality from plague. This first made its appearance with an isolated case in 1902; in the following year seven deaths occurred, but the disease disappeared in the hot weather. In 1904, however, it revisited the district and spread to every part; no fewer than

Other diseases.

1,200 deaths were recorded, and possibly many others were concealed. Though it died down as before during the summer months, plague broke out again in the winter, and 1905 assumed alarming proportions. By the end of the year total mortality had reached 7,394, and as yet the scourge shows no signs of disappearance. As in the rest of Rohilkhand, the advent of plague was attributed by the people to the action of Government, and this belief has not yet been era licated. It was supposed that there was a deliberate intention to reduce the population, owing to the inconvenicace and expense of having to feed so many persons during the famine of 1897; and so much credence did the theory obtain that even wells were picketed to prevent Government agents from outaining access to them. Consequently little could be attempted in the way of preventive measures such as forcible segregation or disinfection. The people leave an infected village, but merely go elsewhere and carry the disease with them: till recently no one has come forward for moculation; but its benefits are slowly beginning to be appreciated.

Infilmities.

Statistics of infirmities were first collected at the census of 1872, and are extant for that year and for each succeeding enumeration. The figures seem, however, to be of little value, owing chiefly to the difficulty of definition. Thus in 1901 there were 160 deaf-mutes, as compared with 536 at the previous census and 556 in 1881, while in 1872 the total was but 164. No safe deductions may be drawn from these figures: the latest total is low in comparison with those of adjacent districts, except perhaps on the west; it is certainly lower than might be expected in a tract in which goitre is found so frequently, as the connection between the discase and the affliction is very clearly established. In the case of insanity the variations are unimportant: there were 120 persons described as insane in 1901, and this figure may be taken as normal. Leprosy shows a great decline, the total dropping from 280 in 1891 to 219 at the last census. The affliction is more prevalent in Moradabad, while in the Doah districts to the west it is comparatively rare: its origin is still unknown, and we must be content to leave it for the present a matter for speculation. Similarly, the number of blind persons has markedly decreased, the total in 1901 being

2,086 as compared with 2,758 at the preceding enumeration. The decline is probably real, as throughout the provinces the growing immunity of the population to small-pox has materially affected blindness, which is a common resultant of the disease. The total is still high, and the prevalence of this infirmity is very noticeable throughout the Meerut and Rohilkhan'l divisions. To quote the last census report, "it seems probable that the closer ill-ventilated houses of western districts, which are filled with pungent smoke while cooking operations are going on, may tend to cause diseases of the eye more than the draughty wattled huts in the eastern districts." *

^{*} q v I, 202.

CHAPTER II.

AGRICULTURE AND COMMERCE.

Like the rest of Rohilkhand, the district is fully cultivated Cultivatand has attained a high state of development. The proportion of cultivated land to the entire area, however, is necessarily somewhat low by reason of the large extent of forest in the Najibabad and Nagina tahsils. This forest is shown in the annual returns under the head of culturable waste, but it should properly be omitted in order to enable the formation of a correct comparative estimate of the district and its relation to the adjacent tracts. The earliest authentic records of cultivation are those of the ninth settlement, prepared between 1833 and 1838. It was then found that 470,104 acres or about 41 per cent. of the present total area were cultivated, this figure being probably below the normal, owing to the depressed condition into which a large portion of the district had fallen as the result of unscientific assessments and other causes. During the currency of the settlement an enormous improvement was effected, for in 1865 the area under the plough was no less than 591,256 acres or 51.5 per cent. When the settlement operations closed nine years later, a marked increase was already noticeable, the total cultivation having risen to 607,163 acres. The rate of extension appears to have been well maintained, since in 1884-85, the first year in which the present system of annual returns was instituted, the net cropped area was 635,098 acres. For the ensuing ten years the figure remained high, averaging 640,670 acres or 55.7 per cent. of the whole; but in the last year a distinct decline was observed, as the result of a succession of wet seasons, which produced much deterioration in the lowlying parts of the district. and especially in the Nagina tahsil. From 1896 to 1900 the average was only 609,341 acres, the lowest point being reached in 1896-97, a year of general famine. With the commencement of the new century almost all traces of depression vanished and

ed area.

cultivation went up by leaps and bounds, the increase in the first year being over 46,000 acres. The average area under tillage from 1901 to 1905 inclusive was 660,946 acres or 574 per cent of the whole district; and if from the latter be excluded only the reserved forests, which constitute but a small portion of the whole jungle area, the proportion rises to 61 per cent. An examination of the conditions prevailing in the different parganas show that outside the forest tract the standard of development is extremely high, except perhaps in the parts adjoining the Ganges, where the effects of deterioration in the khadır are still visible. Thus only 305 per cent. of the whole area is cultivated in pargana Barhapura, 329 per cent. in Najibabad and 403 per cent. in Afralgarh. In the remaining area the lowest proportion is 597 per cent. in Bashta, followed by 63 6 per cent in Dhampur, both parganas possessing large stretches of khadur land which is more or less precarious. Similarly in Daranagar and Mandawar the average is but 66 per cent, but in the rest of the district it rises to 70 per cent, or more. the highest point being attained in pargana Chandpur, where no less than 766 per cent. of the entire area is under cultivation. The returns for 1905-06 will be found in the appendix.* The figures for that year probably represent the present normal condition of affairs, but it may be noted that the cultivated area was higher by some 12,000 arres in the preceding year, which showed a record figure of 674,421 acres.

Culturable waste. The barren area has been dealt with in the preceding chapter, where it was shown to amount at present to 11.2 per cent. of the whole district. Adding this to the proportion cultivated and including the 1.07 per cent of the grove land, there remains no less than 30.33 per cent. shown as fit for cultivation. From this it might be imagined that a considerable extension of tillage may be expected in the future, but in all probability such is not the case. It must be remembered that this culturable area includes all the forests, and must therefore be reduced by some 145,000 acres. Another large deduction must be made on account of new fallow, averaging 76,738 acres, as most of this is deliberately left untilled in accordance with

^{*} Appendix, Table V.

the general principles of rotation, which are of especial importance in a district that depends to so large an extent on the outturn of sugarcane. Thus the land available consists of 101,848 acres of old fallow and about 34,000 acres of culturable waste, though it may be doubted whether any large proportion of this could be tilled with profit. As already mentioned, much of it differs but little from that shown as barren; but at the same time it is certain that there is room for improvement in the deteriorated parganas of Afzalgaih, Barhapura and Dhampur, as also in the abandoned khadar lands of Bashta and Mandawar. Elsewhere, except perhaps in Seohara, the areas of old fallow are small and in several cases quite insignificant, the Nagina and Chandpur parganas, for example, showing but 756 and 552 acres respectively. Further details of area will be given in the various pargana articles.

In its general features the agriculture of the district does not differ from that of the adjoining country, and calls for no The points most worthy of mention are the special comment comparative absence of irrigation, which the physical characteristies of the tract render unnecessary, and the presence of an unusually skilled body of cultivators. Owing probably to the former circumstance, it is generally the custom in this district. as in Muzaffarnagar to the west, to devote almost equal attention to all the good land in the village, and no special care is paid to the fields in the immediate neighbourhood of the homestead. except by tenants of the market-gardening class. The only distinction is that made in favour of certain crops, and especially cane, which by reason of its intrinsic value obtains almost all the available supply of manure. The agricultural implements differ in no way from those in use everywhere, nor have any improvements been introduced, except in the substitution of the iron sugar mill for the old wooden kolhu, which has now entirely disappeared. In other respects, it is true, considerable progress has been achieved, particularly in the extension of the doublecropped area and also in the crops themselves, the more valuable staples and those necessitating a higher style of husbandry having largely taken the place of the inferior grains that constituted the principal products of the tract fifty years ago.

Agucul-

Harvest.

The agricultural year is divided into the three generally recognised portions by the harvests which here go by the usual names of kharif, rabi and zaid or intermediate. The last is of very little importance in this district, as during the five years ending in 1906 the average area occupied by zaid crops was only 2,709 acres, so that this harvest may practically be neglected. Of the others the kharif or autumn harvest assumes by far the more prominent position, largely exceeding the rabi in point of area throughout the district, with the single exception of pargana Barhapura, where the acreage in either case is approximately equal. At the settlement of 1865 the kharif area was 353,566 agrees as compared with 265,419 acres sown in the rabi. Since that time both figures have largely increased, the kharif making somewhat more rapid progress. For the five years ending in 1900 the latter harvest covered on an average 443,393 acres and the rabi 299,536 acres, while from 1901 to 1905 inclusive the figures were 447,706 and 316,599 acres respectively.

Doublecropping.

As will be evident from the returns given above, the total area cropped is very much greater than the actual amount of land under cultivation. This results from the practice of gathering two harvests on the same field in a single year, thereby materially increasing the total produce, although it is not quite certain how far this may be done without impairing the fertility of the land. It is manifest that the practice of double-cropping has grown largely in favour of late years; the early records are unreliable and even useless, for the returns of 1865 show only 232 acres as dofusli, and this is certainly inaccurate: this view was taken by the settlement officer himself, who was well aware that the custom was in common vogue, and held that a large allowance must be made for land bearing two crops. Accurate returns are available from 1885 onwards. From that year to 1895 the double-cropped area averaged 103,400 acres annually or 16 per cent of the net cultivation, while for the next ten years ending in 1905 the average area bearing a double crop was 109,890 acres or 17 per cent. of the total area under tillage. The proportion in the second period would have been much higher but for one or two unfavourable seasons, and the extent to which the practice can be carried was illustrated in 1905, when no less

than 127,220 acres bore two crops in the year. The effect of this extension is most visible in the case of barley and gram, which are now grown on land that formerly produced only an early kharif ciop. On the other hand, it has reduced the fallow area to the lowest possible proportions, so that probably the apparent advantage should be to some extent discounted.

Among the various kharif crops by far the most important Rice. is rice, which occupies on an average 177,635 acres or 397 per cent of the total harvest. This represents an increase of about 33,000 acres since 1865, and this extension is due partly to the general development of the district, and partly to the marked improvement which has taken place in agriculture by substituting more valuable staples for the inferior crops grown in former years. Generally speaking, the rice area is mainly confined to the lowlying lands and richer soils in which the natural moisture is more abundant and artificial irrigation practicable. Thus in the parganas of Akbarabad, Afzalgarh, Nihtaur, Nagina and Dhampur more than half the kharrf area is under rice, while the general average is largely exceeded also in Sechara, Najibabad an l Barhapura. On the other hand, the lowest proportion is to be found in the southern half of the Bijnor tahsil, and in pargana Bashta, where much of the land lies high and the ricebearing tracts of the Ganges khadir are in a deteriorated state, only 10.6 per cent. of the kharif area is taken up by this crop. Almost all the rice grown in this district is of the late or transplanted variety, and only in pargana Nagina is early rice extensively grown. The most valuable kind is the fine species known as munji, for which the khadir lands of Mandawar have long been famous.

Next to rice comes sugarcane, another crop of great value. It averages 71,485 acres or 16 per cent. of the kharif harvest; the highest proportions being 20.7 per cent. in pargana Kiratpur and 20 per cent. in Nagina, while the lowest are 81 per cent in Bashta and 11.5 per cent. in Barhapura. The remarkable extent to which sugarcane is produced in this district is of great economic importance, as it constitutes the chief article of commerce and its value as a rent-paying factor cannot be over-estimated. The area has at all times been large, though it has greatly increased of

late years, keeping pace with the general development; in 1865 sugarcane covered 46,581 acres, so that the extension of cultivation in the case of this staple has been well over 25 per cent. Of course, it must be remembered that the crop occupies the ground for the whole year, and also necessitates a year's fallow; but as the average profit is estimated at Rs 75 per acre, the amount realised by the cultivators is more than 53 lakhs, which is almost equivalent to the total rental for two years. The cost of cultivation, however, is proportionately great, as the rent is high and plenty of manure and irrigation are necessary; as many as twenty ploughings are given before planting, and constant weeding and digging are requisite after the young shoots have set. For rice, on the other hand, nine or ten ploughings as a rule suffice, but the net profit in this case seldom exceeds Rs. 8 per acre.

Cotton.

Another valuable crop is cotton, though its cultivation is declining. In 1865 it covere l 46,270 acres, whose eas the average for the past five years has been 36,143 acres or 81 per cent of the harvest. Its distribution is very uneven, as in Baihapura and Najibabad the preportion of cotton is no less than 231 and 178 per cent respectively, and the general average is only exceeded elsewhere in Dhampur, Scohaia and Afzalgach; in the western and central uplands the figure drops rapidly, and in the Bijnor tabilit is less than five per cent. The crop is commonly sown in sugarcane fields after the latter has been harvested; and its decline is due to the substitution of maize, millets or dry rice, which can be immediately followed by the more profitable cereals such as wheat or wheat and barley mixed. Cotton requires careful tillage, the fields being ploughed about six times, and weeded thrice, the rent is calculated at zabta rates, and the profit is less than half the outlay, averaging from Rs. 10 to Rs. 12 per acre.

Other kharif crops.

A large area is taken up by the millets, and especially bajra which is grown extensively on the lighter and unirrigated soils. More usually it is sown in combination with arhar, the latter remaining on the ground throughout the winter. Thus mixed, it averages 67,814 acres or 15·1 per cent. of the kharif area, but in all the parganas of the Bijnor tahsil the proportion exceeds 31 per cent., while elsewhere the crop is comparatively rare, save

in Kiratpur and Burhpur, both of which show figures closely approximating to the district average. There is, on the other hand, but little juar, or rather very little is allowed to come to maturity, for the crop is sown on some 20,000 acres annually and cut while green for fodder: in this way it is of considerable value, while the practice has the further advantage of clearing the ground at an early date, so as to admit of a lequate preparation for the ensuing rabi. Of the pulses, arkar has been already mentioned: it is never grown by itself, but is either combined with bajra or cotton, or else sown round the edges of other fields. The smaller kinds known as urd, mung and moth, cover on an average 33,353 acres, or 7.4 per cent. of the harvest More than half this area is to be found in the Bijnor tahsil, these crops being especially common in the southern parganas; they are also raised extensively in the adjacent tracts of Burhpur in tahsil Dhampur. Maize has increased in popularity to a surprising extent of late years, as is the case throughout Rohilkhand. 1865 it was almost unknown in this district, while the present average is 10,350 acres, or 2.3 per cent. of the kharif. The only large areas, however, are in the lowlands of Dhampur, Afzalgarh and Seohara, though it is to be found in all parganas. The extension of maize is a welcome feature, for the crop is among the earliest to come to maturity, and this quality is of the greatest importance in a district which has so frequently suffered from famines, as a result of a premature cessation of the monsoon. The rest of the *kharif* area is taken up for the most part by small and coarse millets, such as kodon, kutki, kangni and shamakh. These are grown in all parganas, but especially those of the Bijnor and Najibabad tahsıls, being suited to the poor soils of the higher uplands. There is a fair amount of garden cultivation and a small area is under hemp, the fibre of which is made into sacking at Nagina and elsewhere.

In the rabi the lead is taken by wheat, which is the most Wheat. valuable of all the food grains and is an important article of export. Sown by itself, it covered during the five years ending in 1906 no less than 125,543 acres on an average, or 396 per cent. of the entire harvest. It occupies a secondary position to barley throughout the Bijnor tahsil and pargana Kiratpur, as in

the high unwatered lands of the Ganges watershed the yield is poor and unprofitable; but in the Nagina tahsil it occupies more than 50 per cent. of the rabi area, and in Najibabad the proportion is over 45 per cent, Dhampur also being slightly above the general average. In 1865 the area under wheat was 114,000 acres, so that the extension of this staple has been noteworthy. Still greater has been the increase in the cultivation of gujui or wheat mixed with barley, which now amounts to some 60,700 acres, or more than double the figure recorded at the tenth settlement. A further area of about 20,000 acres is under wheat and gram, the latter combination being most common in the Nagina and Dhampur tahsils, while half the gujar lands belong to tahsil Bijnor. Wheat requires from five to eight ploughings, as much manure as is available, and two or three waterings in order to' obtain the maximum yield. The cost of cultivation is consequently high, and the estimated profit, after deducting rent and other charges, is not more than Rs. 8 per acre. The quality has been improved to some extent during recent years by the introduction of a new variety known as mundia, which has gained considerable popularity in the parganas of Chandpur, Bashta, Nihtaur and Nagina.

Barley.

Barley, sown by itself and in combination with wheat, gram and masur, averages 108,019 acres or 34·1 per cent. of the land cultivated for the rabi harvest. The proportion ranges from 55 per cent. in tahsil Bijnor to less than 24 per cent. in Najibabad, the lowest pargana averages being 13·2 per cent. in Najibabad and 14·2 per cent. in Barhapura, while the highest percentage is 63·9 in Daranagar. Barley does well on a light soil, with little or no manure and irrigation, provided the winter rains are seasonable, and the crop is therefore well suited for the uplands with their small village sites and scanty means of irrigation. Sown by itself, barley averaged 10·4 per cent. of the harvest, while mixed with gram it contributed a further 4·4 per cent., the remainder being barley and wheat.

Other"
rabi
crops.

Gram is very largely grown in the district by itself, in addition to its admixture with wheat or barley; it averages 41,555 acres or 13.1 per cent. of the harvest, and the proportion varies but little in the different tahsils. It is lowest in Bijnor, and

highest in all those tracts in which rice is the chief autumn staple, for gram is commonly sown as a second crop. The increase of double-cropping has resulted in a marked extension of the gram area, which is now twice at great as in 1865. The remaining food crops of the rabi comprise masur, averaging 4,461 acres, of which three-fourths are included in the Nagina and Dhampur tahsils; peas, to the extent of some 1,400 acres, in the same subdivisions; and garden crops, potatoes, and other vegetables, chiefly in the vicinity of the towns. Other produce comprises tobacco and oilseeds, the latter being of considerable importance. Altogether they cover on an average 15,132 acres or 4.8 per cent. of the harvest, and consist principally in mustard and rape; there is but little linseed, though small quantities are sown in each pargana. Tobacco cultivation in Bijnor at one time bid fair to assume a prominent position, but now the area under that crop is no more than 150 acros It is grown by Sanis, who are the most careful and painstaking of all the agricultural castes. The interest lies, however, in the experiments which were conducted many years ago with the view of improving tobacco cultivation by the introduction of Turkish and American varieties. These were undertaken, by Colonel Parrott and Major Smith, of the Stud department, in 1868, seven kinds of seed being adopted for the purpose. Several of these failed, but one or two, and notably the Virginian, succeeded admirably, and a smoking mixture, composed of this tobacco blended with Manila and Latakia, grown at Bhogpur in the forests of Najibabad, was sold in tins to European purchasers, and for a time acquired some celebrity. The experiment was unfortunately abandoned before the industry had become fully established, the chief reasons being that the imported plants rapidly degenerated, necessitating constant importation of fresh seed, and that the difficult process of curing required supervision by experts, whose services were not to be obtained from India. The most important result was the discovery that tobacco of a high class can be grown in this climate and that its cultivation, if systematically practised, can be undertaken at a profit. No opium is grown in Bijnor, the cultivation of poppy having been prohibited for many years.

The comparative scarcity of irrigation is due partly to the bundance of the rainfall and partly to the nature of the soil. te lowlands little is required, except for garden crops, and in ie dry uplands little is obtainable by reason of the sandy sture of the subsoil, and consequently attention is given rather those crops which flourish best without artificial watering. The tal irrigated area at the settlement of 1865 was but 34,253 eres or only 5.8 per cent. of the cultivation, the average being arkedly exceeded in the Nagina and Dhampur parganas alone, here the proportions were 17.8 and 18.2 per cent. respectively. nese figures were due to the presence of the canals, which were so utilised to some extent in Burhpur, this pargana having 9.1 or cent. irrigated. It was then considered that the amount had en greatly understated, and it is certain that concealment of igation was far from uncommon, in view of the approaching vision of assessment. This surmise was afterwards verified in me measure, though it is doubtful to what extent the cultitors were influenced by the experience of several years of ought and famine, which gave a great stimulus to the conuction of wells. In normal years irrigation drops to a very w figure, but the fluctuations mainly affect canals, and the ea watered from wells exhibits a constant tendency to increase. 1884-85 the total irrigated area was but 24,384 acres or 3.8 r cent. of the cultivation, and for the ten years ending in 1895 corresponding figures were 22,628 acres or 3.5 per cent. en came a dry period and a very decided increase was served, the average for the five years ending in 1900 being no s than 43,606 acres, the highest point being reached with ,606 acres in the last year. The returns for the past five years w an average of 39,806 acres or 6 per cent. of the net tivation. This is exceeded in Burhpur, where 16.8 per cent. s irrigated, in Nagina with 16 per cent., in Dhampur with 9. and in Seohara and Najibabad with 7 per cent. each. the remaining parganas of the Nagina and Najibabad tahsils d in the northern half of Bijnor the amount of irrigation is remely small.

At the present time 47.6 per cent. of the land irrigated is tered from wells, 38.4 per cent. from canals, 4 per cent. from

lakes and ponds, and 10 per cent. from the streams and other sources. These figures exhibit the great change that has taken place of late years, for in 1865 wells supplied but 31 per cent., canals 32.3, ponds 29.2, and streams 7.5 per cent. At that time the well-irrigated area was 10,618 acres, while from 1886 to 1895 it was 11,828, and for the next ten years 19,362 acres, the maximum being 35,106 acres in 1899-1900. The development of well irrigation, taken in combination with the great extension of the area supplied by the canals, of which mention will be made later, is of the highest importance in determining the security of the district; though unfortunately they generally serve but to strengthen those tracts which have never suffered much, as they increase but slowly in the less favourably situated parganas. There has indeed been a considerable improvement in Bashta, and also in Seohara, but apart from these the amount of irrigation from wells is only appreciably large in those parganas which have the benefits of canals as well, notably Burhpur and Dhampur. The same remarks apply to ponds and other sources, though in every instance the area is extremely small, with the single _axception of Najibabad, where some 2,921 acres are irrigated by damming some of the streams and watercourses.

The history of canal irrigation in this district is a record of ambitious schemes and modest achievements. The first proposal was that of the collector of Moradabad in 1824, who recommended a canal for the north of the district, and this was followed by the deputation of the superintendent of canals at Bareilly in 1824 to report on the practicability of the undertaking and the selection of the most suitable lines. The report was submitted in the following year, advocating the construction of a canal from the Khoh river, and in 1838 the suggestion was adopted, the Nagina canal being constructed at a cost of Rs. 57,843 and opened for irrigation in 1840. The next project was that of Lieutenant Anderson of the Bengal Engineers, who proposed an eastern Ramganga canal, the scheme being superseded two years later by that of Lieutenant Jones of the same corps, who did so much for the irrigation system of the Tarai. The intention was to dam the river two miles below Kalagarh and to lead a channel through Afzalgarh, across the Banaili and Pili and thence into

Canals history the Dhela in Moradabad, with three distributaries leading southwestwards between the rivers of pargana Afzalgarh. ated cost was Rs. 3,02,279, and the annual revenue anticipated was Rs. 75,000; but it was found that the latter was far too panguine an estimate, and that the natural obstacles were too great, while no account was taken of possible changes in the Ramganga's The project was therefore abandoned in 1843. Some seven years later the Nihtaur canal from the Gangan was constructed, but of this nothing is known definitely till the year 1863; it is said to have cost Rs. 12,123, and to have started work in 1850, the design having probably originated with the district authorities. The next scheme was that of a western Ramganga canal, planned by Mr. J. Parker, an engineer, in 1855. It was to start near Kalagarh, and after passing southwestwards through parganas Baihapura, Nagina, Nihtaur and Daranagar, to turn south at Haldaur through Chandpur and Bashta, and so into the Morada'ad and Budaun districts. The project received careful consideration, but was suspended on account of the mutiny. In 1870 it was revived, Mr Paiker. in conjunction with Mr. Roberts, putting forward a somewhat modified scheme, by which a channel from Bhogpur on the Ramganga was to supply the water required for the rabi, and a feeder from the contemplated Eastern Ganges canal that necessary for the kharif, in Budaun and Moradabad alone. Mr. Jones's old idea of an eastern Ramganga canal was at the same time revived; but no final decision was reached till 1876, the delay being due to the consideration of other designs. It was then rejected on account of the excessive cost, the inadequate supply of water, and the doubtful advantages that might be anticipated. The Ganges canal project originated with no less an authority than Colonel Baird Smith, R.E., who in 1861 recommended the construction of an irrigation channel through western Rohilkhand. No action was, however, taken till 1867, when Mr. Parker was directed to survey the country and report on the feasibility of the scheme. The proposed headworks were to be at Shampur in Najibabad, and the line taken was to run through that pargana, Kiratpur, Akbarabad, Bijnor and Daranagar. From Jhalu it was to follow the course selected for the Ramganga

canal in 1855, traversing Moradabad in two and Budaun in three channels. The scheme took practical shape in 1869, when one of the Moradabad channels was commenced as a famine relief work, but further construction was delayed, owing to discussions that arose as to the demand on the Ganges, the interference with drainage, and the financial results. The last revised project was submitted in 1873, but the undertaking was abandoned the next year, after the departure of Sir William Muir, who had lent it strong support. The reasons which led to this result were, briefly, the insufficient supply afforded by the Ganges, the unremunerative nature of the enterprise, and the absence of any great necessity for such a canal, except perhaps in the dry uplands of this district. Thus the canals in Bijnor belong merely to two small systems, of which some account may now be given.

Khoh near Kamaruddinnagar, an earthen dam some 600 feet long being thrown across the bed of the river. The water thus passed by a supply channel about three miles long into the Pilkhala, and then down that stream to the canal head at Jogipura, two miles distant from the junction. A change in the course of the Khoh, however, necessitated a new dam, which was placed a m le higher up at Jahanabad, and the water was thus brought into the Sukhrao, over which a second embankment was thrown, in order to force the water into the new supply channel leading to the Pilkha'a. The regulator at Jogipura, as originally constructed, had a head on the west side for the Ranikota bianch, a minor channel some three miles long that urigates a small tract of country to the south-west, and another heal on the east for the main canal, sluices being provided in the centre to pass any surplus water down the Pilkhala into the Gangan. For the first two miles the main channel passes through high ground and little irrigation is effected, but below this point the water surface is slightly above the level of the country, so that the fields can be watered by flush. At first the canal was slightly more than nine miles long, and tailed into the Karula close to the town of Nagina; an earthen dam placed across the stream about a mile

below the town supplied water to two small branches on the right and left banks, each about three miles long, and known as

As originally constructed the Nagina canal took out of the Nagina

the Kiratpur and Puraini branches. The additional supply thus poured into the Karula was utilised some distance lower down by the zamındars of pargana Dhampur by means of a dam across the stream, and a water-rate was charged for the irrigation thus obtained. Between 1882 and 1884 the canal was partially remodelled at a cost of Rs. 11,480, the heads of the two minor branches being placed in the canal channel itself, thus obviating the necessity for the Karula dam. A more complete scheme of reconstruction was undertaken between 1892 and 1894 at an outlay of Rs. 37,197. The last three miles of the main channel were abandoned, and the heads of the two branches carried to more suitable sites higher up the canal. The Kiratpur branch was thus made to command a much larger area, and at the same time was extended for a considerable distance to the south, along the watershed of the Gangan and Karula, eventually tailing into the Gangan canal near Nihtaur; and the Puraini branch was carried past the town of Nagina and continued along the doab of the Karula and Pao thoi as far as Fakhanpur, with a total length of ten miles. In 1895 the Kotra minor was added to the Purami branch at a cost of Rs. 2,369, in order to reach the country to the south-east of Nagina, and in 1897 an escape was made from the same branch leading into the Paodhoi. The last addition was the small Nainpura minor, constructed in 1901. and taking off from the right bank of the Kiratpur branch; it is about two miles in length, and follows the line of an old zamindari cutting. The total length of the canal is now about 44 miles There is an inspection-house at Kot Qadir near the dam on the Khoh, and the canal offices are at Nagina.

Vihtaur anal. The Nihtaui canal begins close to the town of that name, in the village of Easulpur Sheikh on the east bank. It was originally known as the lower Gangan canal, to distinguish it from the upper Gangan, a small supplementary channel dug about 1840 from the sources of the river with the object of replenishing the supply for the Nagina canal. No sooner, however, was the work complete than the springs abandoned the head of the cutting to broak out elsewhere, and the undertaking never proved of any value. The waters of the river are held up at Rasulpur Sheikh by a masonry regulator, which was

severely damaged by floods in 1876 and again in 1889, so that considerable improvements were found necessary and carried into effect in 1894. For the first mile the canal passes through a deep cutting, with good shisham plantations on either bank. Originally it was eight and a half miles in length, ending near Alinagar, but in 1882 the channel was extended as far as Morna. At the same time the Garabpur minor was constructed to irrigate the land between the canal and the Gangan for the first five miles, and to replace the irrigation that had formerly been obtained by damming the river; and a second small minor was also made at Umri near the canal tail. The chief objection taken to this original line was that for three miles it followed the valley of the Karula, and in this portion of its course the banks rapidly deteriorated, rendering the work of maintenance very difficult. In 1896 it became necessary to remodel the whole canal at an estimated cost of Rs. 31,994. From the first mile the channel is now carried along the watershed of the Gangan, and the canal has now a length of 142 miles, falling into the river a short distance west of Tajpur. At the same time the Garabpur minor was abandoned, while two others, known as the Bhatiana and Sarakthal, were excavated on the left bank, and the old Umii minor was reconstructed and extended for five and a half miles. Subsequently the Tajpur minor, of similar length, running from Morna to Tajour, was made in 1901. The main canal and branches have now a total length of some 32 miles; there are inspection-houses at Nihtaur and Alinagar.

A certain amount of irrigation is obtained in pargana Nih- Managetaur by means of private channels leading from the right bank moome. of the Gangan and deriving their supply from the headworks at Rasulpur Sheikh, and for such water a rate is charged and credited to the Canal department. There are one or two other private undertakings of a similar nature in the district, such as a small canal taken from the Malin, and one fed by the Sukhrao in pargana Barhapura. These are not, however, in any way under official control. The Nagina canal was at first under the superintendent of canals at Bareilly, but in 1845 it was made over to the collector of Bijnor, the collection of revenue and the work of maintenance being entrusted to the tahsildars of

Nagina and Dhampur. The Nihtaur canal was managed in the same way, and it was not till 1879 that the collector handed over charge to the executive engineer of the northern division, Ganges canal. This arrangement proved unsatisfactory, for Roorkee was 35 miles distant from the nearest canal head and no railway was then in existence; and consequently in 1881 the canals were again transferred to the collector, who was assisted by the district engineer in carrying out works and repairs, and by the tahsildars in assessments and collection of revenue. With the introduction of local self-government in the same year the question again arose of entrusting the canals to the Irrigation department, but the transfer was postponed till 1885, when the entire system was put under the direction of the executive engineer, Rohilkhand canals, in whose charge it has since remained. Since 1896 the Bijnor canals have formed a subdivision with an overseer in charge, assisted by a ziladar and two sub-overseers When first made, the Nagina and Nihtaur canals commanded some 6,000 and 4,000 acres of country respectively, while the present figures are now about 35,000 and 27,000 acres, and this increase has been attended with a corresponding rise in the receipts. In 1841 a scale of water-rates was introduced, varying according to the class of soil irrigated. This was replaced in 1845, when the collector took over the canals, by an occupiers' rate varying both according to the nature of the crop and also as the irrigation was by flow or by lift. This was revised in 1873, and again in 1882, but the system remained the same. For fruit and nursery gardens the annual charge per acre is Rs. 5. for irrigation by flow and Rs. 4 by lift, and for sugarcane the corresponding rates are Rs. 2-8-0 and Re. 1-10-8. For vegetables, garden crops, and tobacco the rate is Rs. 2 or Re. 1-8-0 per crop, while for cotton, wheat, barley and pulses the figures are Re. 1 and Re. 0-12-0 respectively. The latter rates are also adopted for rice irrigated after the first of July, whereas before that date the cost is Rs. 2-4-0 per acre for flush water and Re. 1-8-0 for that obtained by lift. Irrigation by lift is, as a matter of fact, almost negligible, amounting to less than seven per cent. of the whole. The owners' rate has been collected since 1880, and has been fixed at one-third of the occupiers' rate on lands

assessed at dry rates. Detailed figures of revenue are available from 1863-64 onwards. Up to that date the gross direct revenue was Rs. 15,830, spread over a period of 22 years. From 1863 to 1873 the average receipts were Rs. 3.426 on 2.674 acres irrigated; for the next ten years the figures were Rs. 5,930 on 3,432 acres; and for the succeeding decade Rs. 15,000 on 8,037 acres. With the reconstruction of the canals both area and revenue rose rapidly; for the 12 years ending in 1905-06, the former averaged 14,897 acres, the maximum being 25,362 acres in 1896-97, and the gross direct revenue averaged Rs 27,422, towards which the occupiers' rate contributed Rs. 22,163 and the owners' rate Rs. 2,827. Financially the canals have proved a great success. The gross capital outlay up to 1905 was Rs. 2,35,870, while the earnings have been Rs. 5,72,663. Against the latter figure must be set the cost of maintenance, which in many years has been considerable; but on the other hand, a large allowance must be made for the greatly increased land revenue in the tract now irrigated by the canals, the indirect receipts under this head being at present nearly Rs. 15,000 annually.

The wells employed for irrigation in this district are seldom. Wells. if ever, of masonry. Such wells are used almost exclusively for drinking purposes, and are usually to be seen in towns or by the roadside. Sometimes, too, they are sunk in an orchard or garden, where their permanence as well as their more ornamental appearance render them necessary: for everyday work in the fields the cost is excessive, ranging from Rs. 500 to Rs. 1,500 in the upland tracts, though in the low khadir they can be sunk for about Rs. 200. For field irrigation resort is had to the kachcha or unprotected well, this being a rough shaft sunk to the water-bearing stratum. They can be made in all parts of the district save where, as in the high western plateau, the subsoil is too sandy to prevent the sides from collapsing before water is reached. They are most common in sawai soils, especially in the neighbourhood of the villages, and they cost on an average Rs. 3, though the expense of labour is frequently reduced to a minimum by the co-operation of the cultivators. The cost varies of course with the depth, which averages about 22 feet throughout the

district, though the difference between the extremes is very considerable. In many cases additional expenditure is incurred by lining the well with coils of twigs and grass rope, which protects the sides to some extent from external pressure and also from the swing of the bucket: where the subsoil is light and friable the mactice is almost necessary if the well is to last for a whole season. It is on this same question of the subsoil that the nature of the well depends Where the shaft is sunk through a strong and consistent stratum, it will last for years, and is worked by means of a large leathern bucket known as a charrus and drawn by bullocks. This tenacious clay stratum is called bam, and corresponds to the mote dharte of Budann: its distribution is very uneven, but as a general rule it may be said that such wells are most common in the south-west of the district, and in the Chandpur and Burhpur parganas there are some which, when protected by a thatched covering during the rains, have leen in constant use for twenty-five years and more. By their means about one-third of an acre can be watered daily while occasionally a greater area is irrigable by employing two buckets at the same well. The more common variety, however, is a more shallow affair, dug at the beginning of the cold season and falling in during the rams. The water is extracted by means of the dhenkli or wooden lever, to one end of which an earthen pot is attached by means of a rope. The process is slow, and the area that can be thus watered varies from one-twelfth to onethird of an acre daily. Well irrigation has made great strides of late years, for while at the survey of 1866 the number of unprotected wells in use was only 4,585, by 1906 the total had risen to 10.800. More than half of these were to be found in the Dhampur tahsil, and the bulk of the remainder in Bijnor and especially in the southern parganas. The masonry wells used for irrigation were only 511, of which 232 were recorded in tahsil Bijnor.

Other sources.

The amount of irrigation from other sources is very inconsiderable. Tanks are employed in all parganas, but three-fourths of the area so watered lies in the Dhampur tahsil, where there are several fair-sized *jhils* in the uplands. The water is obtained by the usual system of *beris* or swing-baskets, by which

it is lifted to the level of the channels supplying the fields. Some reference has already been made to the use of dams on the various watercourses. By far the largest area thus irrigated lies in pargana Najibabad, where the Malin and to a less extent the Rawasan are employed in this manner. Next come Burhpur and Nihtaur, in which water is obtained from the Gangan by means of flood channels known locally as okhs; and Seohara, where the Ekra and Dungraiva are similarly utilised.

The intimate connection between irrigation and scarcity is Early emphasized in this district by the fact that Bijnor has on several occasions suffered greatly from abnormal climatic conditions. Unfortunately there are no records on the subject of famines prior to the introduction of the British rule. It may be assumed with some degree of certainty that in early days the experience of the district was very similar to that of the tract beyond the Ganges to the west, but the assumption is purely conjectural, as no reference to Bijnor is male by the historians who narrated such events. It is consequently impossible to say to what extent the district was affected by the famines of 1345, 1471, 1631 and 1661. are told that in each case the most acute distress prevailed throughout northern India, and it seems impossible that Bijnor could have escaped, though probably the mortality was less evident than elsewhere, owing to the undeveloped state of the country. The great famine of 1761 visited the whole of Rohilkhand, and tradition states that immense numbers of people died of starvation, and that many emigrated to more favoured tracts. The famine of 1783 is still remembered throughout the country, but it seems to have been more acute in the south and east.

The first calamity of this nature that was experienced after Famine of the introduction of the British rule was that of 1803-04, when Bijnor was still included in the Moradabad district. It seems that on this occasion the rains failed almost immediately after their commencement, and in the beginning of July Mr. W. Leycester, the collector of Moradabad, reported that the cotton and sugarcane were drooping from want of water, while great fears were entertained for the entire kharif harvest; matters were rendered worse by the steady export of corn to the parts already distressed, and it was pointed out that the active interference of Government

1803-04.

was urgently needed. By September large lalances lad accumulated, and the prospects of the coming rabi harvest were very low. Every endeavour was made to facilitate means of irrigation by damning the Gangan and the sma'l streams, but the sandy nature of the soils in many parts proved a serious obstacle to the construction of more wells. Some relief was afforded by the remission of Rs. 2,50,000 on the demand due for the kharif, but this had no effect on the steady rise of prices. A fair rabi had been sown, but the failure of the winter rains reduced the area to very small proportions: no revenue could be collected, zamendars were absconding in every direction, and the cultivators were at the end of their resources. At the close of January wheat was selling for 39 sers to the rupee and gram at 49 sers. were then considered high, but within a week they had risen to 31 and 35 sers respectively. The whole country was disorganized by the dread of invasion by the Marathas and by the general lawlessness: grain riots broke out in several places, and towards the end of March the starving people were plundering the few crops that had arrived at maturity. The collector applied for military aid to assist him in maintaining order, and also for large advances of money as the only means of giving an impulse to the succeeding year's cultivation. In 1804 the balances outstanding in Moradabad were higher than in any other part of the North-Western Provinces, and little more than half the revenue was collected. Large remissions were made, but these hardly affected those classes of the population which suffered most, and though no records have been preserved, it is clear that the mortality and distress must have been very great. The famine closed with the rains of 1804, though it was long before the district fully recovered.

Scarcity of 1825.

The minor scarcities which occurred from time to time during the next thirty years do not seem to have had much influence on Bijnor. In 1819, many other districts were suffering greatly, the collector of Moradabad wrote that he had never seen so fine a kharif as had been harvested in western Rohilkhand. In 1825 there was a great drought throughout the western half of the provinces, resulting in an extensive failure of the kharif, though the cotton and sugarcane had almost escaped, saving the agricultural

population from the sufferings of destitution. The rabi area was considerable, but no attempt was made to raise a second crop on the kharif lands, and the alsence of rain rendered the outturn in the dry area extremely small Bijnor, however, fared much better than the rest of Moradabad, for the khadır lands of the Ganges and Ramganga yielded a moderate harvest, as also did the parganas of Chandpur and Burhpur; but the agricultural classes were enduring great privations, though corn had been imported in large quantities from Kumaun and Garhwal. The collector had received permission to suspend one-fourth of the revenue demand in Bijnor, but such a step eventually proved unnecessary, and relief was confined to the liberal distribution of advances.

occasion the state of affairs in Bijnor closely resembled the conditions prevailing in 1803, though the visitation was of a less severe nature. The kharif was practically destroyed by a premature cessation of the rains, and a partial fall during September only served to excite hopes which were doomed to disappointment. Prices, too, rose to an unprecedented height, resulting in lawlessness among the agricultural classes, and it was reported that the chief cause of anxiety in Rohilkhand was the crowded state of the criminal jails. The situation was saved to some extent by an opportune fall of rain in the beginning of February 1838, and the rabi harvest proved fauly satisfactory. Prices fell very rapidly, and confidence was gradually restored; the absence of

General famine once more occurred in 1837-38, and on this

The rains again failed in 1860, and this, following on a Famine of series of defective monsoons, produced great distress in Bijnor. As early as July the price of wheat had risen to 12 sers or even less, but the price mattered little when there was no corn to be purchased. A good fall of rain occurred in the middle of July, but this was followed by a prolonged period of dry weather, and the kharif outturn was very scanty. The prospects of the rabi were equally gloomy, and the increase of destitution forced

communications at that time rendered difficult the exportation of grain to the tracts where famine was still raging, and consequently the local supply was generally sufficient. As before, no actual relief measures were undertaken, but revenue was remitted

in the district to the amount of Rs. 91,069.

Famine of 1837-38.

1860-61.

Government to adopt measures of relief early in 1861. The ablebodied were employed on public works at low wages; old and infirm persons and young children were supplied with cooked food; and women of the better class were paid a small daily allowance for spinning thread out of cotton gratuitously supplied. The number of persons thus relieved rose to 25,379 in February 1861, and continued to increase rapidly throughout the hot weather, only declining when a fall of rain in June again prepared the soil for tillage. Up to the end of July 936,489 persons, counted by daily units, had been relieved at an expenditure of nearly Rs. 32,000, of which Rs. 21,000 were contributed by the central relief committee at Agra, Rs. 5,606 by Government, and the remainder by local subscriptions. In addition, large sums were advanced for providing the tenants with the materials of cultivation, and revenue was remitted to the sum of Rs 22,518. It was found necessary, however, to continue relief operations for a considerable period and it was not till October, when the autumn harvest had been gathered, that the works and poorhouses were finally closed. It was noticeable on this occasion that there was far less crime in the district than in previous famines, although the number of offences against property was considerably higher in 1861 than in the two preceding years.

Famine of 1868-69.

Another bad famine occurred in 1868-69, when Bijnor suffered more than any other district in the United Provinces. The rabi of 1868 was extraordinarily abundant, but plenty was changed into want by the drought of July; the people were encouraged to sow their autumn crops by a fall of rain towards the end of that month, but by the middle of September the rice had failed, bajra and juar followed, and finally the sugarcane withered at the end of October. Even the khadur lands were bare, and in November unmistakeable signs of distress appeared throughout the country. On this occasion aid was promptly given, for before the end of October work was sanctioned on five first-class roads, the cost to be paid from the road fund; on the 20th November the first instalment of autumn revenue was suspended, and advances were offered for the construction of masonry wells; and on the 9th of December the collector was authorized to proceed with district works. More than twenty tanks in various parts of the district were

excavated, roads and jhils were repaired, and the Nagina canal was cleared throughout its length. In January and February a few showers of rain greatly benefited the small rabi that had been sown and, what was far more important, enabled the sugarcane to be planted: but it was estimated that the rabi outturn was no more than one-fourth of the normal, while the area bore the same proportion to that usually sown. By March 1869 the distress had increased to an alarming extent. The numbers on the relief works had risen from a daily average of 1,741 in December to 2,787 in February, while in the ensuing month the total jumped to 18.697. The scale of wages was reduced in April, and again in May, but the averages for those months remained high, being 14,089 and 10,697 respectively. From that time onwards a distinct improvement took place, and in June the daily average for the local works fell to 3,414 persons; but in July prices again rose, owing to the absence of rain, and in the beginning of August the fear of a second drought reduced the cultivators to despair. It was not till the 17th of that month that heavy rain fell and removed all further apprehensions; gradually the masses of labourers were thinned, the average falling from 7,376 in August to 1,485 in October, and at the end of the latter month the works were closed. In addition to the relief thus given to the able-bodied, considerable sums were expended at the 17 poorhouses that were opened in the district, mainly on behalf of women and children. These institutions were started towards the end of February, and in March the daily average attendance was 6,229. This gradually decreased to 1,468 in June, but 10se again to 2,553 in August, the poorhouses being finally closed in October. Counted by daily units 683,039 persons were thus relieved, while the corresponding figure for the works was 2,237,692. The total cost of famine relief was Rs. 1,79,483, of which sum Rs. 45,000 were devoted to the poorhouses. These charges were met mainly from provincial funds, while Rs. 20,000 were contributed by the central committee at Allahabad, and Rs. 19,000 were raised by private subscriptions in the district. Indirect aid was also afforded by Government in the shape of about Rs. 70,000 given in advances for seed corn and wells, while the revenue was suspended to the amount of over four lakhs. Though no accurate

returns are available, it is beyond question that this famine was exceptionally severe, and it was estimated that between 3,000 and 4,000 persons died from the immediate or secondary effects of starvation; those who suffered most were the labouring classes, and it would appear that the agriculturists for the most part managed to subsist without aid.

Famine of 1877-78.

When famine again made its appearance in 1877-78 Bijnor again suffered acutely. The early cessation of the rains and the hot west winds that ensued caused practically a complete failure of the khurrf, and by the end of August the district resembled a desert. Little or no cultivation was anywhere to be scen, the part that suffered most being the old tahsil of Chandpur. Prices had risen to an alarming extent, but it seemed that the people had some supplies in hand, and when relief works were experimentally started in September, the attendance was very small. By the beginning of October, however, there were over 2,000 persons at work, but the numbers dropped rapidly with a fall of rain, which enabled the land to be prepared for the rabi harvest. With the completion of sowings and the advent of the cold weather the attendance at the poorhouses rapidly increased; a number of deaths from starvation were reported, and the condition of the people was daily growing worse. The relief works, on the other hand, attracted but few labourers, showing that the distress was mainly confined to women, children and the infirm. During February, however, the increasing number of deaths and the crowds that flocked to the poorhouses made it evident that the relief works were inadequate to meet the situation, and the rate of payment was raised accordingly. Those who were capable of work were discharged from the poorhouses, while orders were given to the police and all officials to bring in any persons who were in a starving state. By the middle of March the attendance on the works rose to 7,400 and at the poorhouses to 5,300. These figures gradually declined, and the advent of the rabi harvest afforded ample employment. The crops were fair and the area large, so that the fall in prices and the demand for labour enabled the authorities to close the works on the 13th of April and the poorhouses two days later. But the famine was not yet at an end. After the harvest no labour was required in the fields

and relief was resumed in the beginning of June. By the end of that month there were 9,700 persons on the works and 850 in the poorhouse, while a week later the figure had risen by one-half. The rains then broke, and the people betook themselves to work on the land, but about the 15th of July a spell of fine weather set in, and the situation became very anxious. Nearly 15,000 persons were on relief towards the enl of the month, and prices were still rising, while the resources of the people were completely exhausted. The numbers continued to rise till the end of August, when heavy rain fell at length, causing a considerable improvement in prospects and a marked decline in the attendance on the relief works, though there was a continued increase in the poorhouse. Fever and dysentery were rife throughout the district. and the death-rate was extremely high, but in September matters were slowly improving, and when the early rice was harvested, the prices of all food grains fell. The relief works were rapidly deserted, and both these and the poorhouses were closed on the 15th of October. The works undertaken during this famine consisted mainly in improving the various roals in all parts of the district; the total expenditure on such works was Rs 1,43,314, and in this mainer employment was given to 1,410,123 men, women and children, counted by daily units, the rates of pay being 15, 9 and 3½ pies per diem respectively. These operations would ordinarily have cost Rs. 94,000, had they been undertaken by the Public Works department at the ordinary rates; so that the balance properly chargeable to relief was Rs. 49,314. At the same time the sum of Rs. 43,756 was expended on poorhouse relief, the total number of persons thus deriving benefit being 399,803 between October 1877 and the following April, and 266,867 from June to October inclusive. Substantial assistance was also given to the landowning classes, the extent of whose difficulties may be estimated from the fact that in April 1878 Bijnor showed a larger outstanding balance of revenue than any other district, the amount being half the kharif demand. Suspensions were sanctioned to the extent of Rs. 3,60,590, almost the whole of which was afterwards realised, the remissions amounting to Rs. 35,803. The tenants also received substantial advances for the purchase of seed and cattle, the amount thus disbursed in this district being over Rs. 26,000. The loss of cattle during the famine was extremely severe, especially in the southern parganas, in which there are no large grazing reserves. Attempts were made to discover the actual mortality from starvation among human beings, but the results were not satisfactory, as it was acknowledged at the time that many deaths had not been reported; the a tual number which came to the notice of the authorities was 892, all of which occurred before April 1878, though it is certain that a large number of people died from want of food during the ensuing hot weather. The famine practically came to an end with the gathering of the *kharif* harvest in 1878, but its effects remained visible for a long period, and prices continued to be abnormally high throughout the following year.

Famine of 1896-97

Bijnor was not again visited by famine till 1896-97, and even then it was not officially declared to be famine-strucken, though the scarcity was undoubtedly severe. In the preceding year the crops hal been decidedly below the average; the rains of 1895 had ceased in the beginning of September, and the kharif outturn was estimated at three-fourths of the normal, while the following rabi yielded but one-half of the average. Even the latter figure was generally regarded as allove the mark, for barley and other staples grown in the poorest soils had completely failed. Previous experience had shown that a shortage of one-third in the year's outturn meant famine, but signs of distress were not as yet visible, and test works opened during the spring and summer of 1896 attracted no labourers. The absence of the winter rains caused a great contraction of the sugarcane area, but otherwise the kharif area of 1896 promised well till the mensoon came to an end on the 22nd of August, causing the loss of the late lice. The estimated yield of the kharif was about five-eighths of the normal, and in the ensuing rabi, in spite of rain in November. December and February, the average yield was about nine-sixteenths, the low figure being due to the small area under cultivation. Still no crop was an absolute failure, and the cultivators, though much pressed, were able to procure food, and even to employ a considerable amount of labour. The real cause of the distress was the enormous rise in prices, which had practically doubled, and this mainly affected the classes who earn money wages and

have to buy their food, such as weavers, dyers and the daylabourers in towns It was also observed that the Musalman population suffered infinitely more than the Hin lus, and this was proved by the fact that to the former class belonged two-thirds of the number attending the poorhouses. As early as August 1896 it began to be seen that help was needed for certain of the poorest classes who were unable to work, and four poorhouses were started at the tahsil headquarters; at first they were maintained by public subscriptions, but in October the management was taken over by Government. The attendance at the beginning was small, but during the winter the distress became more acute, and committees were formed in 17 towns and large villages for the distribution of funds subscribed locally for the indigent and particularly parda-nashin widows. The system was subsequently extended and regular doles were given to those in need of relief, and only persons of the lower classes were referred to the poorhouses. The rate was reduced by half in April 1897, when the gathering of the rabi harvest had caused a fall in prices, but it was again found necessary to raise the amount in August, though a month later the distress was mitigated, and after October it practically ceased. Altogether Rs. 61,158 were expended from the charitable relief fund, and of this Rs. 19,721 consisted in money relief given to 1,901 respectable poor persons, while the bulk of the remainder was distributed among 2,009 cultivators for the purchase of cattle and seed. A further sum of Rs 15000 was spent on providing work for the able-bodied, but the number of persons thus employed was small in comparison with the records of previous famines. The first work to be started was that on the road from Moradabad to Hardvar between Nagma and Dhampur, which was opened on the 22nd December 1896. numbers remained low to the middle of January, but at the end of that month 2,419 persons were employed, and a second work was begun in February on the road from Haldaur to Nihtaur. Throughout February the numbers averaged at out 5,500 daily, but declined in March to such an extent that the works were finally closed on the 1st of April. From these figures the comparatively mild nature of the visitation becomes evident. The people suffered more from the gradual absorption of their resources through a considerable period than from any sudden and acute calamity. No cases of actual deaths from starvation were reported, and indeed the year 1897 was remarkably healthy, the death-rate being below the average. The recovery of the district on this occasion, too, was extremely rapid, for by 1898 all traces of the famine had disappeared. Since that time the district has been unusually prosperous, the rains have been as a rule well up to the average, and in no year has any distress been experienced.

Prices.

In spite of the obvious relationship between famines and prices, the history of the latter is far from being a mere record of recurring scarcities, for it involves many other and more potent factors than occasional failures of the monsoon. Ultimately, of course, prices depend on the purchasing power of the rupee, in the determination of which the nature of the harvest in any particular year plays but one out of numerous parts. Apart from the general economic question, the history of prices in this district is particularly important, for on prices depend not only wages but rents, especially in a tract in which grain rents are so-common, and where there have been constant interchanges between cash and grain rents. Unfortunately the early records are very incomplete. It is clear that at the cession of the district prices were extremely low, as estimated by modern ideas. It has been noted that in 1804 prices were considered abnormally high when a rupee could purchase 39 sers of wheat or 49 sers of gram, and that a rise on the part of wheat to 31 sers meant famine. appears that the general rate rose gradually during the first half of the nineteenth century, but not to any marked extent. From 1832 to 1842 wheat averaged 41 sers, and during this period a famine of considerable intensity occurred, prices being higher than on any previous occasion within the memory of man. A marked rise seems to have taken place everywhere about the time of the Mutiny, and it is clear that, whatever may have been the cause or causes, prices never descended after that event to the old low level. As regards subsequent changes, the proximate causes are more easy to determine. The shortening of supplies resulting from famines raised prices on each occasion, and the restoration of normal conditions brought a distinct fall. This is clear from a consideration of the quinquennial averages in the case of the principal food-grains from 1862 onwards. Thus from 1862 to 1866 the prevailing rates were 23.8 sers for wheat, 33.4 sers for barley, 15.1 sers for common rice, and 27 sers for bajra; while from 1867 to 1871, during which period a severe famine intervened, wheat averaged 17.14, barley 25.54, rice 13.75, and bajra 21.68 sers. Incidentally it may be observed that the former rates were far in excess of those obtaining in 1858, when 54 sers of rice and 44 sers of barley were purchasable for a rupee; but then again there had been famine in 1861. From 1872 to 1876, when the district had recovered and the harvests were generally good. prices became much easier, though the old level was never regained: it may indeed be taken as a general rule that a famine has the effect of raising prices permanently, not of course to the highest point attained, but to a level considerably higher than that of the rates in force before such a calamity. The averages for the period were 20737 sers for wheat, 29 24 for barley, 14 2 for rice, and 22 6 for burra. Another famine occurred in 1877, and from that year to 1881 the rates were abnormally high, wheat fetching but 15.3, Larley 22.7, rice 11.4, and bajra only 15.3 sers. The subsequent recovery was almost complete, for from 1882 to 1886 wheat sold for 1923 sers, barley for 29, rice for 13, and bajra for 22 sere to the rupee. Then came a great change, which was observed not only in Bijnor, but throughout northern India generally. The rise was due in large measure to the opening up of the country by means of the railways, which brought prices to a general leverand practically obliterated the old local variations that had left om district in abundance while its neighbour was perhaps suffering from the agonies of famine; and also to the fall in the price & silver, the two factors being closely related, inasmuch as improved communications meant a greater export trade with countries in possession of a gold standard. The change was, however, emarkably sudden · from 1887 to 1891 wheat averaged 15 37 sers, baley 22.5, rice 12.08, and bajra 16.6 sers. On this occasion there has no relapse, but rather the reverse, for the market stiffened wit a run of bad season's. Between 1892 and 1896 the average fo wheat was 15.28 sers, for barley 23.45, for rice 11.28, and for bajra 164 sers. The famine of 1897 raised prices throughor the country, and its effects were

consequently felt in those tracts in which the failure of the crops wa but inconsiderable. The rates remained high for a long period, as scarcity continued to prevail in other parts of India; so that from 1897 to 1901 the average prices in Bijnor were 13 27 sers of wheat, 2005 sers of lailey, 1047 sers of rice, and 16.88 sers of bajra for a rupee But for the famine and also for the high rates prevailing in 1900, the averages would have been much lower; for in the former wheat sold at less than 10 sers throughout the year. and larley for under 13, and in the latter prices were but two sers lower all round Subsequent good harvests have mended matters at least for a time. The rates for the five years ending in 1906 were 1562 sers for wheat, 25:13 for barley, 10:81 for rice. and 20 43 sers for bijra. These figures take us back to those of 1887, and indeed in 1904 prices were exceptionally low. The general conditions have, however, altered greatly, for the market is now very sensitive to external influences, and the local variations of former days are no longer to be expected.

Vages.

To what extent wages have risen commensurately with prices is hard to say. The agricultural labourer is usually paid in grain, so that his remuneration remains constant. In cash wages there has generally been a rise of all out 25 per cent during the last thirty years, for whereas a field labourer received Rs. 4 monthly in 1875 the corresponding rate in 1905 was arupee more. Wages are or linarily higher in the towns than in the country, but in most kinds of employment there are no fixed rates, the earnings of labour depending on the skill of theartizan. It is an unforbed fact that more is now paid for inskilled labour than was formerly the case; but here again many factors have to be taken into account, such as the nature of theseason, the general demand, and temporary influences arising from railway construction and other large public undertakings.

terest.

The current rates of interest are of geat importance in an agricultural tract where the cultivator, and frequently the landowner, is habitually dependent on borrowed money and stock. This district does not, however, presen any peculiarities in this respect. The most common loans are fose in money or grain for seed, and in those the tenant lonowenther from his landlord or from the village Bania, or else from some well-to-do tenant who

has some spare cash or a reserve of corn. The principal is repaid at harvest, usually in kind, together with the interest, which is generally one-fourth of the former. The common rule of commuting the loan into cash at seedtime, when grain is dear, and changing it back to kind at harvest, when prices are low, is as well known in Bijnor as elsewhere, to the great profit of the lender. Petty cash loans, when articles are pawned, carry interest ranging from 12 to 18 per cent per aunum, and when the security is merely personal, from 18 to 37½ per cent.; but these are in most cases for short periods only, and the risk incurred is considerable. In larger transactions, when jewels or other valuable gools are given in pledge, lower rates obtain, varying from 6 to 12 per cent, and the same rates are adopted in loans on personal security where the Lorrower is known to be a man of substance. Small plots of land are mortgaged at any rate between 9 and 18 per cent., but the interest drops to 7 or 8 per cent. in the case of large properties, and is of course lower when the mortgage is accompanied with possession. Generally an investor calculates on obtaining six per cent on land, the value of the property being calculated at the rate of eight annas per cent. per minsum for interest on the outlay: in special cases, where other considerations than more investment are involved, a return of four per cent is occasionally accepted.

No progress has as yet been achieved in the matter of village banks, though it is probable that Bijnor offers as fair a field for such enterprise as the rest of Rohilkhand. Two banks were started experimentally in villages under the Court of Wards, but they failed to take root, and expired after a brief existence. The system was not understood, nor its merits appreciated, so that the result was not unnatural. Nothing further has yet been attempted, but it is probable that fresh efforts will be made departmentally in the near future.

The local standards of measurement present no peculiar features. In determining area the unit is the regulation or Akbarr bigha of 3,025 square yards, being a square of 55 yards or two chains. This is now in general use, and has replaced the many varieties of pakka bigha which in old days were to be found, almost every pargana having a separate standard of its

Village banks.

Weights and measures.

These local bighas rested ultimately on the will of the landowner, and ranged from 80 to 90 per cent. of the Government measure: their existence was a source of endless confusion, and their abolition, which was practically effected by the revenue survey of 1865, had become imperative. The small or kachcha bigha is usually one-third of the full measure, but this again is in practice a very indefinite amount. Nominally it consists of a square of 20 paces, and such a standard naturally admits of no exact determination, the ultimate arbiter being the jarib or chain of the zamındar. Whereas in most places the kachcha bıqha is about 900 square yards, in the extreme south of the district it is much less, and not uncommonly it is regarded as merely onefourth of the pakka bigha. With regard to weights, the customary ser is one of 90 tolas, as compared with the regulation ser of 80 tolas, but the latter is gradually coming into general use, as the injury to trade caused by the variety of standards in the adjoining districts has long been recognised. The origin of these heavy weights, which are found in all parts of Rohilkhand, is not clear. The rupee struck by the Rohillas of Najibabad averages about 171 grains, and perhaps its nominal weight was greater; it should have been 175 grains in order to produce the 90 tolu ser at present in vogue. Possibly the matter has something to do with the sugar trade, for there is a well-known custom in several districts to use a larger ser for weighing sugar, so as to make a fair allowance for moisture.

Manufactures. With the exception of sugar, which forms the chief article of export, the manufactures of Bijnor are of no great importance; but there are several local industries of considerable interest, which in some cases deserve mention on account of the excellence of the craftsmanship, and also because they are more or less peculiar to the district. Of the manufacture of sugar it is unnecessary to speak at length, as the process followed is similar to that found in other parts of the provinces. The juice of the cane, which is obtained by crushing in an iron mill, the old wooden kolha having entirely disappeared, is strained and then boiled in an iron cauldron for several hours, till it becomes thick. It is then known as gur, and from this is produced rab, by further boiling and refining, the liquor being purified by the alkaline mineral

known as sajji or carbonate of soda. The rab is again refined and strained, resolving itself into molasses and the coarse brown sugar known as khand, and from the latter a final boiling produces the white crystalline shakar or misri. With the exception of Gorakhpur, in no other district are so many persons employed in making sugar as in Bijnor: the total at the last census was 3,477, including dependents, but this leaves out the large number of sweetmeat makers and sellers, whose products are sometimes exported, the wares of Najibabad being especially famous.

The manufacture of cotton cloth is still carried on to a large extent, though the industry has been affected, as is everywhere the case, by the factory-male articles of Cawnpore, Bombay, and Nearly 66,000 workers in cotton, including their families, were found in the district in 1901, and this figure is exceeded in no other part of the United Provinces. From this it would appear that the weavers are maintaining their ground, but their productions seldom travel beyond the limits of this district, except to supply the villagers of the hills and the Naini Tal Tarai. Cotton-weaving is carried on in all parts of the district, the chief centres being Nagina, Najibal ad, Chandpur, Sahaspur, Afzalgarh and the larger villages of pargana Daranagar. The materials are mainly the ordinary cloths known as garha and guzz, the finest varieties coming from Afzalgarh; a weaver of that place obtained a silver medal and a prize at the Agra Exhibition in 1867. At Chandpur the red and white checked cloths known as chauthai are produced, while in several places the cheap and flimsy muslin called thathawa or lamgaga is turned out. Ordinary dyeing is done with vegetable dyes obtained from the forests, and in some places cotton-printing of fair excellence is to be seen. The best is that of Nihtaur, but at Bijnor some printers adorn the cloth with patterns done in white metal, such as tin and alloys of tin and lead, pounded and mixed with glue and water, and then burnished with a smooth stone. Sometimes, too, the material is covered with crude patterns in yellow orpiment, or vermilion, daubed on with a steel rod. Embroidery in cotton is not common, but the carpets and bedspreads of Sherkot have a local reputation. Other textile fabrics include the coarse hempen sacking made at Nagina, and woollen blankets, turned out at Najibabad and many other places.

Textile fabrics.

Woodcarving.

The most calebrated inclustry of the district is the elonycarving of Nagma. Tradition states that it was introduced about two centuries ago from Multan, but the art appears to be of comparatively recent origin, although the Nagina wo.kmen have for several generations made gunstocks, charpai legs, and masnads of chony, and adorned them with superficial floral patterns. They have now attained a high proficiency in the cabinet-maker's trade, and there are five or six large workshops employing a number of hands in the town. The ebony is imported from Central India in logs, at the rate of about Rs. 14 per maund, and the high price, combined with the brittle nature of the wood, renders the work somewhat coatly. Owing to its extreme hardness, the carving is never deep: the craftsmen are all Musalmans, and the work is strictly Muhammadan in character: under-cutting is never practised, and the designs are either g ometrical or floral, wrought in delicate and crisp relief with the chisel. For infliior work the fret-saw is sometimes employed. but it has not found favour, and the Nagina carving is one of the few industries as yet unspoiled by a European connection. The articles thus ornamented are usually small, such as folding tables, trays, caskets, screens, picture-frames, and walking-sticks. The workshops of Nagina have obtained prizes at exhibitions in London, Glasgow and Paris, as well as in many places in India; and the industry, which for long was in a stagnant and languishing condition, is now flourishing. Occasionally a somewhat doubtful improvement is attempted by inlaying the black wood with silver, mother-of-pearl and ivory; but it is generally considered that such extraneous ornamentation only impairs the artistic merit of the original work.

Metals.

In former days the reputation of Nagina rested rather on its metal industries than on its wood-carving, although the latter was frequently combined with the art of the gunsmith. Four matchlocks with carved wooden stocks were sent to the Paris exhibition of 1867, and found a ready sale at 375 francs each. The place was long famous for such weapons, as also were Najibabad and Dhampur. Both of these towns still possess a considerable trade in articles of metal. The iron is imported, mainly from Hathras, and is worked up into locks, plates, cutlery.

and the like. At Bijnor quantities of pocket-knives are made by the Lohars, and are frequently exported to the markets of the Doab. The Kaseras and Thatheras of Dhampur turn out brass candlesticks, ornaments for native carts and harness, gongs and bells, the last being usually made of an alloy of copper and lead. At Najibabad decorative huggas, bowls, and other articles of domestic use are manufactured out of brass, copper and bell-metal.

Glass.

Another noteworthy industry is that of making glass vessels which are chiefly produced at Nagina and Najibabad. Very little glass is manufactured on the spot, mest of it being imported in the shape of crude country glass from Aligarh and elsewhere. From this large quantities of phials, used principally for carrying Ganges water, are turned out and exported to all parts. Other articles, such as lamp chimneys and globes, are made from Euro; ean glass, chiefly for local consumption The glass-makers of this district are remarkable as being the only craftsmen in these provinces who can make bottles of moulded glass. These are small flasks, resembling cheap Venetian scent-bottles, and blown in a clay mould made in two halves on a European bottle and then joined together The workmen have not, however, learned the art of toughening glass, the material being very deficient in lime: but it is quite possible that with a little instruction they might be capable of producing a very fair imitation of the European ware.

Other in-

The pottery of the district calls for no comment, as it presents no peculiar features. The only distinctive ware is that of Chandpur, where pipe-bowls and swrahis or water bottles are made in large numbers: for ornamentation a mould is employed, the clay of the vessel being wrapped in fine muslin to prevent it from adhering to the mould, whereas elsewhere the usual practice is to sprinkle the interior of the mould with sand or ashes. There is a good deal of work in wood and bamboos, consisting chiefly in lacquered and painted chairs, boxes and other articles, the principal seats of this industry being Kiratpur and Nagina. At Najibabad excellent baskets are made of split bamboos, while the same place is noted for its carts, though the latter are by no means a monopoly of that town. The papier-maché ware of Mandawar

is fairly well known and has grown in popularity; it takes the form of small articles, such as pen-boxes, inkstands, paper-knives, and the like, and is generally desorated with gilt and coloured patterns. Work in leather is of some small importance, especially in the form known as sabar, which consists of roughly cured deerskins, tanned a rich brown colour with the bark of the sab tree. This is mostly done at Najuhabad, and the shoes of that place have attained a considerable reputation. The only other manufacture that need be mentioned is that of jancos or the Brahmanical threads, which form the chief industry of Bijnor and are exported in large quantities to distant markets.

Trade.

The export trade of the district is mainly in sugar, bamboos, and other forest produce. Bijnor is not one of the grain-exporting tracts, except in years of abundant harvests, or when dealers are tempted by high prices prevailing elsewhere: as a rule, the local supply is not equal to the demand, and food grains bulk largely among the imports. The lest are mainly salt from the Punjab, European piecegoods, metals and spices. Fomerly the traffic found its way for the most part across the Ganges towards Meerut and Muzaffarnagar; but now fully four-fifths of the trade is rail-borns, and the roals have dropped to a very subordinate position. There are no figures available to show the volume of trale in recent years. Some time ago registration outposts were maintained at five of the Ganges ferries and at Kauria on the Garhwal frontier, but these places no longer possess the importance they once had; the introduction of the railway has entirely changed the condition of affairs and has also affected the relative importance of the various markets.

Markets.

A list of all the regular bazars held in this district will be found in the appendix. The principal trade centres are, of course, the chief towns, and especially those which lie on or near the line of railway, such as Dhampur, Nagina, and Najibabad. The more distant marts of Bijnor, Chandpur, Kiratpur and Nihtaur have consequently declined in importance, though they still retain their commercial position as local collecting and distributing centres. Such places, as well as the other towns and larger villages, are the scene of markets held once or twice a week, to which the inhabitants of the surrounding country resort

for the purpose of disposing of the produce of their fields and for supplying themselves with the modest requirements of daily life.

Another list shows the fairs that periodically take place in Fairs. the different parganas and tahsils. These gatherings are ostensibly of a religious nature, but the opportunity is scized in many cases for doing a considerable amount of purely secular business. There are no places of more than local sanctity, and the pilgrims at these fairs seldom come from beyond the limits of this district. None of the Bijnor fairs can compete in point of size with t' ose of Hardwar, the Nauchandi at Meerut, and the Kartik fan at Garmukhtesar on the Ganges lower down. Actually the largest is that at Daranagar, where some 25,000 persons assemble for bathing in the Ganges on the full moon of Kartik. Similar, but smaller, fairs take place at Chandi and Chand Goela in pargana Najibabad, and at Rafiunnagar in Mandawar. The Haldaur fair is of recent origin, having been started by Kunwar Hailans Singh, and has grown rapidly in popularity of late years too, has that at Baldia or Sikandarpur in the same neighbourhood. This is held in honour of Burha Babu, who is said to be an incarnation of Brahma and the special pation of women and children. Gatherings in his name are unusually numerous in the district, and the same may be said of Zahir Diwan, a local saint otherwise known as Goga Pir. These assemblies go by the generic name of chhariyan, owing to the flags that are borne in procession on such occasions. The traditional history of the holy man has been given in dealing with Muzaffarnagar, the reputed district of his birth.* There are several fairs of purely Musalman origin, held around the tombs or in commemoration of departed saints, but they are in several cases attended by Hindus and Muhammadans alike, just as the great gatherings at Bahraich and at Makanpur in the Cawnpore district.

In early days the district was heavily handicapped by the practical absence of means of communication. The Ganges was the only highway, and even that was navigable but for a portion of its length; none of the old imperial routes lay through the district, the greater part of which was clothed in impenetrable

Communications.

forest. Some improvement was probably effected during the days of Rohilla rule: the principal towns appear to have been connected by rough tracks, but these were im; assable during the rains, and in many places were obstructed by deep beds of drifting sand at all seasons. Such was the state of affairs when Bijnor was ceded to the East India Company in 1801. The new alministration was alive to the need of roads, and instructions were given to the local officials to open up internal communications as far as possible The agency was, however, lacking: the zamindars were held nominally responsible for the maintenance of such tracks as existed within the limits of their estates, but as these generally followed the line of least resistance, avoiding cultivated land and going from waste to waste, they were extremely irregular and their condition hopeless. The arrangement proved wholly unsatisfactory, and at the first regular settlement the landowners readily agreed to pay aroad cess of one per cent. in lieu of their former obligation. The funds thus obtained were utilised for the maintenance of existing roads and for new construction; in 1841 they were male over to a local committee, which continued in existence till the formation of the present district board. The committee did good work from the first. though it was not till after the Mutiny that any great strides were made. By 1876 the district was covered with a network of fair roads, with an aggregate length of 486 miles, while thirty years later the total was 578 miles. A constant difficulty has been experienced by reason of the absence of any local supply of kankar, rendering the construction of metalled roads so costly as to be almost prohibitive; and though every endcayour has been made to keep the main routes in good order, by reserving a raised track in the centre for light traffic only, and by liberal expenditure on maintenance, the fact still remains that the roalborne commerce is seriously impeded by the prevalence of sand in the western tracts, and especially by the nature of the khadir. as well as by the comparative scarcity of bridges over the numerous rivers and streams. In many instances the character of the channels and river beds renders bridging impossible, and this is particularly the case in the north, where the greatest hindrance to successful exploitation of the forests lies in the very imperfect

means of communication. An immense advance has been achieved in this connection by the construction of the railway; so much so indeed that the district now possesses almost adequate means of access to the outer world. A permanent bridge over the Ganges is of itself of untold value, while a new lease of life has been given to all the chief towns of the district, not even excepting Bijnor, which now lies within twenty miles of a station. Besides the railways actually within the district, there is the line to Hardwar and Dehra beyond the Ganges, which lies within easy reach of the northern forests; while on the other side the railway from Moradabad to Ramnagar will confer a boon almost as great on the eastern parganas.

The main line of the Oudh and Rehilkhand State Railway Railways. traverses the district from south-east to north-west, first entering pargana Seohara from Moradabad near the town of Sahaspur, and passing through the eastern uplands as far as Najibabad. There it turns to the west, through the Kıratpur and Mandawar parganas, and eventually crossing the Ganges by a bridge at Balawali. The portion from Moradabad to Nagina was opened on the 8th of October 1884; that from Nagina to Najibabad on the 1st of April 1885; and the remainder on the 1st of January in the following year. There are stations at Sahaspur, Seohara, Dhampur, Puraini, Nagina, Bundki, Najibabad, Barampur, Chandok and Balawalı. The Ganges bridge, which was not opened to traffic till the 9th of May 1887, is a great structure, 2.886 feet in length with eleven spans of 250 feet each, built of steel girders resting on piers sunk to a depth of 100 feet below low water level; the total cost was no less than Rs 27,94,584, although nearly seven lakhs of this were expended on the extensive training works on either side. A branch line of railway takes off at Najibabad, following the line of the Lansdowne road, and leaving the district at Kauria, a short distance before its termination on the right bank of the Khoh, opposite Kotdwara; there are stations at Bhogpur and Saneh Road. This little line was completed on the 24th of December 1896, and has proved of great value in opening up the forests and the hill country to the north. The main line has had an immense effect on this district, giving a great stimulus to trade and developing the many towns

along its course to a surprising extent. No further extension of the railway system in Bijnor is to be expected for the present, though possibly there is room for other branch lines. The western parganas would doubtless benefit by inproved communications, as also would the forest tracks in the north-east, though the latter will to some extent be served by the line from Moradabad to Kashipur and Ramnagar.

Roads.

The only provincial road in the district is the unmetalled route from Najibabad to Kotdwara and Lansdowne, some 13 miles in length. This was originally constructed as a military road, to connect the hill cantonment of Lansdowne with the railway, but it has been to a large extent supplanted by the branch line, though it still bears a fairly heavy cart traffic. The other roads are all local, and managed by the district board, though the maintenance of the metalled roads, and the construction and repair of bridges and culverts on the unmetalled roads are carried out through the agency of the Public Works department. The local roads are divided between four of the officially recognised classes. First come those that are described as first-class roads, metallod, bridged and drained throughout; these, as already mentioned, are few in number and have an aggregate length of 43 miles. They comprise the routes from Bijnor to Muzaffarnagar, Meerut and Nagina, from Nihtaur to Dhampur, the approaches to several stations on the main line, and a few lengths of road in Bijnor itself. The next category comprises secondclass roads, unmetalled, partially bridged and drained. These have an aggregate length of 126 miles, and are generally kept in good order, being serviceable for cast traffic throughout the year. The chief routes coming under this head are those from Bijnor to Moradabad, Chandpur, Nihtaur and Najibabad; from Nagina to Dhampur and Haldaur; and from Nurpur to Tajpur and Seohara. Of the remainder, 24 roads with a total length of 356 miles, are technically known as fourth-class roads, banked but not surfaced, partially bridged and drained; and six roads, 61 miles in length, classified as sixth-class roads, cleared only. The latter are of very inferior description, being little better .

^{*}Owing to a mistake in printing, the road from Najibabad to Moradabad has been wrongly shown as metalled in the map.

than the rough cart tracks which run from village to village. - Those of the fourth class are of a somewhat higher order, but in many cases they are almost impassable during the rains, and in very few instances are provided with bridges. A list of all the roads of the district will be found in the appendix, and their position may be ascertained by reference to the map.

The first-class roads are in every case bridged, but elsewhere Bridges the rivers have generally to be crossed by fords or ferries. There are bridges on the road from Moradabad to Najibabad to Hardwar over all the rivers and streams as far north as the Lakhaihan, on the roads from Bijnor to Nihtaur and Moradabad, from Chandpur to Nurpur and Dhampur, and on the road from Daranagar to Nihtaur. In the east of the district there are practically no bridges, at any rate over the larger rivers. such as the Khoh, Ramgarga and Phika. On the Ganges the only permanent bridge is that of Balawali, but temporary bridges of boats are maintained at Shishamwala-ghat on the route to Hardwar, at Raoli-ghat on the road from Bijnor to Muzaffarnagar, and at Jalalpur ferry, where the Meetut road crosses the river. These boat-bildges are replaced during the lains by ferries. The latter are either owned privately or else under the control of the district Loard, which derives a considerable income from this source. A list of all the ferries in this district will be found in the appendix. The most important are those over the Ganges and Ramganga, and five of the former, at Shishamwala, Nagal, Raoli, Jalalpar and Jafarabad, are maintained through the agency of the Public Works department; they bring in about Rs. 8,200 annually, towards which the Raoli ferry contributes more than half The remaining public ferries are leased to contractors. The chief of these are located at the point where the various roads cross the Khoh and Ramganga, those on the latter river being at Suawala on the route from Dhampur to Kashipur, at Salabatnagar near Afzalgarh, and at Barkhera just below the junction of the Khoh and Ramganga.

There are two dak-bungalows in this district under the Bungamanagement of the district board, at Bijnor and Nagina, while inspection-houses for the use of officials are maintained at Nagina, Dhampur and Nurpur. In addition to these, there are

the various bungalows belonging to the Forest and Irrigation departments; but on the whole Bijnor is not so well provided in this respect as many other districts. With the exception of that at the headquarters town, the only Government encamping-grounds are those of Amhera and Puranpur on the road from Bijnor to Moradabad, and at Amsot and Shampur between Najibabad and Hardwar. At all the principal towns sarais are to be found for the accommodation of travellers, but none of these are public property.

Waterways. The waterways of the district are quite insignificant. The only navigable river is the Ganges, and this is put to very little use. In former days vessels used to ascend the stream as far as Bijnor or even Nagal, but through communication has been stopped since the construction of the Lower Ganges Canal headworks at Narora in the Bulandshahr district. The development, first of the roads, and then of the railways, has effectually put an end to the carriage of goods by water, and the only use to which the Ganges is now put is that of floating down timber and bamboos from the forests in the north. The Ramganga is similarly utilized, but to a less extent, and it is cheaper and more expeditious to transport the produce of the forest to the nearest railway station.

CHAPTER III.

THE PEOPLE.

The district was already constituted as a separate charge Census of when the first attempt at a census of its inhabitants was made in 1847. The enumeration was conducted on somewhat crude principles, no distinction being observed, for instance, between the sexes, and the results can at the best be regarded but as approximately accurate. The total population was ascertained to be 620,552, giving an average density of 325 to the square mile. There were 415,570 Hindus and 204,982 Musalmans. other religions being either left out of account or else included in the latter figure. The number of inhabited towns and villages was 1,976, of which all but 72 contained less than a thousand persons. Of the remainder, eleven had a population exceeding five thousand, though the list excludes Najibabad, presumably because that place, the largest in the district, is made up of several separate mauzas. The towns in question were Nagma, Chandpur and Sherkot, in each of which the total exceeded ten thousand, and Bijnor, Seohara, Dhampur, Nihtaur, Kıratpur, Mandawar, Jhalu and Sahaspur; the urban population amounted in all to 99,275 or 16 per cent. of the whole.

The second census took place in 1853, and was a somewhat Census of more elaborate affair. The population in the six years had increased very rapidly, the total being 695,521, or nearly 75,000 more than the number previously recorded. The average density was 366 to the square mile, but, as is still the case, the rate varied greatly in the different parganas In Nagma it was no less than 645, and next came Kiratpur with 603, while all the parganas of the Dhampur tahsıl were well above the average, as also was the northern half of Bijnor. The lowest rate was only 108 to the square mile in Barhapura, and on this followed Najibabad with 170, and Bashta with 287. As before, the whole population was divided between Hindus and Musalmans, the

former numbering 467,494, and the latter 230,727. There were 1,975 villages, of which 1,900 had less than a thousand, 62 between one and five thousand, and 13 over five thousand inhabitants. The last were the same as at the 1847 census, with the additions of Najibabad and Afzalgarh, the increase in the case of the latter being due to the rapid development of what was formerly a wild and uncultivated tract.

Census of 1865

The next census, taken in 1865, showed a distinct improvement in method over both its piedecessors, details regarding castes and occupations, and also of age and other matters, being taken into account for the first time. The total number of inhabitants showed a slight decrease, owing probably to famine and sickness rather than to the Mutiny, which does not seem to have had any marked effect on the population in any district. The returns showed 46S,566 Hindus, 222,409 Musalmans, and 34 others, giving an aggregate of 691,009 persons. The average density was 367 to the square mile, the increase being due to the diminished area, as the submontane road was now the northern boundary of the district. The relative position of the various parganas was much the same as before, Nagina coming first, with a density of 722, and Knatpur second, with 549. The former was one of the few parganas which showed an increased population, the others being Dhampur, Najibabad, Barhapura and Afzalgarh, while elsewhere there had been a more or less marked decline. The density in Barhapura had risen to 153 and in Najibabad to 191 persons to the square mile. The number of inhabited villages was 1,967, of which 1,888 had less than a thousand inhabitants, 66 between one and five thousand, and 13 with over five thousand, the list of towns being the same as before.

Census of 1872.

It seems probable that the census of 1865 somewhat understated the total population, for in 1872, only seven years later, the number of inhabitants had risen to 737,153, so that in seven years there had been an increase of more than 46,000, and that in spite of the severe famine of 1868-69. The average density had risen to 388 to the square mile, or 394 if the figures of the revenue survey be adopted. Of the various parganas Nagina still headed the list with 740, followed by Nihtaur with 586, and Kiratpur with a density of 574 persons. Every pargana in the

district showed a distinct increase, excepting Barhapura, in which the average had declined to 145; Najibabad, too, was almost stationary, possessing only 193 persons to the square mile. The total of inhabited towns and villages had risen to 2,002, of which 80 contained over a thousand inhabitants; the towns possessing more than five thousand persons remained 13 in number, the former list being unchanged.

During the nine years that elapsed before the next census Ceusus of was taken in 1881. Bijnor once again experienced a severe famine, and this, combined with an abnormally high death-rate resulting from several epidemics of great intensity, necessarily brought about a decrease in the population. The total fell to 721,450 persons, or 15,703 less than that of the previous enumeration. The density thus dropped to 3862 to the square mile, placing Bijnor well below the general average for the provinces, although it had surpassed Pilibhit among the districts of the Rohilkhand divi-The decrease was confined to the western portions of the district, showing that the distress had been greatest in the higher and unirrigated soils. In Barhapura, Afzalgaih and Dhampur there had been a considerable increase, while the decline was most noticeable in Daranagar, Kiratpur and Bijnor. Buihpur and Sechara had remained practically stationary, and in fact showed a slight improvement. The highest density was 708 in Nagma, followed by 571 in Nihtaur and 563 in Dhampur; and the lowest 153 in Parhapura, 182 in Najibabad and 260 in Pashta. At this census the number of towns and villages was 2,040, those with over a thousand unhabitants comprising the 13 towns and 68 other places.

That the depression was merely temporary was amply Census of proved at the census of 1891. The population then showed an enormous increase, the total being 794,070. Bijnor had thus developed far more rapidly than any other district in the three western divisions of the provinces excepting Meerut, while relatively the rate of progression had been much greater, amounting to no less than ten per cent. The mean density was now 4182 to the square mile, or very little less than the provincial average. As before, Nagina was at the top of the list with an average of 784, followed by Nihtaur with 639, and Kiratpur was 626.

Every pargana showed a higher figure than in 1881, excepting Afzalgarh, where deterioration had already begun to set in. Barhapura still occupied the lowest place with an average of 183, and next came Najibabad with 219. The number of inhabited towns and villages had risen to 2,139, of which 2,058 contained less than a thousand inhabitants, 65 between one and five thousand, and 16 more than five thousand. The number of towns had thus increased by three, the additions to the former list being Haldaur, Barhapura and Tajpur.

Census of 1901.

The last census was that of March 1901, and then it was ascertained that the district had once more experienced a decline. the total number of inhabitants being 779,951. This showed a loss of 14.119 during the preceding ten years, and this loss is to be attributed mainly to agricultural depression in certain tracts. The decade opened with a series of unusually wet years, which produced much saturation in the low-lying portions of the district, the parts most affected being Afzalgarh and Barhapura, in which the population had decreased most rapidly, and to a less extent Mandawar and the northern portions of the central uuland. The khadir lands of Bashta also suffered to a remarkable extent, as has been already mentioned in Chapter I, the climax occurring in 1904, when the dread of floods on the Ganges caused extensive migration. The deterioration of the eastern parganas was more serious, as it involved a larger area: the condition of this tract will be noticed further in the separate articles on the two parganas and in dealing with the fiscal history of the district. Elsewhere the population had either remained stationary or increased; the parts which showed the most rapid development were the parganas of Bijnor and Daranagar, and the four which compose the Dhampur tabsil, the rate of increase being especially remarkable in Sechara.

Density.

The mean density, as ascertained at this census, was 415.9 persons to the square mile. This is, of course, distinctly lower than the general average for the Rohilkhand and the neighbouring districts of the Meerut division to the west; but it must be remembered that this result depends mainly on the existence of so large an area of forest land, in which the population is extremely scanty. Omitting those parganas which are included

in the forest belt, the density rises to 528 to the square mile—a figure which approximates to that of Muzaffarnagar on the west, and largely exceeds that of the Moradabad to the south and east. In pargana Nagina the density is no less than 767 to the square mile, although this result is due to the fact that the tract contains the largest town in the district; but the whole Dhampur tahsil has an average of 578, and tahsil Bijnor of 422. The forest parganas, on the other hand, are still very sparsely populated, Barhapura possessing only 156 persons to the square mile, Najibabad 217, and Afzalgarh 248. The last figure is perhaps abnormal, for the pargana lost nearly 20,000 persons between 1891 and the following census, and it is to be hoped that the tract may ultimately recover its lost prosperity.

sight evident. It has been shown in a former chapter that

the recorded number of births greatly outnumbered the deaths. the actual excess being over 37,000.* Further, the district gained, though to a very slight extent, by immigration: for of all the persons enumerated in Bijnor only 95.84 per cent. were born in the district, while of the remainder 3.4 per cent. came from adjoining districts, and .76 per cent. from other parts of India. Incidentally it may be noticed that the proportion of district-born persons to the population is remarkably high, and is only exceeded in Garhwal and Partabgarh. It cannot, however, be assumed that the persons who came from elsewhere immigrated during the ten years in question; in fact, the reverse is probably the case, for in 1891 the proportion of immigrants was distinctly higher. Still it is certain that the number of inhabitants was to some extent swelled by immigration, so that it remains to account for a decrease of at least 50,000 souls. This decrease is in some measure explained by the returns of emigration.

Of all the persons enumerated in India who gave Bijnor as their birth-place, 89 63 per cent. were found in that district at the time of the census, while 9.81 per cent. were residing in other parts of these provinces, and .56 per cent. elsewhere in India. The actual figures show that 79,792 natives of Bijnor were enumerated in

The cause of the decline observed in 1901 is not at first Migra-

found in the Meerut division, 20,000 in Moradabad, and 18,000 in the adjoining tentitories of Naini Tal and Garhwal. The bulk of this emigration came from the Nagma tahsil, in which a decline of 17 per cent. was recorded. At all times Bijnor supplies a large number of cultivators for the Tarai parganas of Nami Tal, and the movement was greatly encouraged by the serious deterioration which set in during the early years of the decade in Afzalgaih and Barhapura, where large areas went out of cultivation. It yet remains to be seen whether this shifting of the population is of a permanent nature, or whether the recurrence of favourable seasons will have produced a reaction. Another fact worthy of notice is that the number of male emigrants was almost as great as that of females. At all times and in all seasons female emigration goes on to a considerable extent in every part of the provinces, as the result of the general customs prevailing with regard to marriage; ordinarily, on the other hand, the emigration of males is comparatively insignificant, and when the total for the two sexes tend to approach, the phenomenon may be considered a sure sign of a decreasing population.

Towns and villages.

The census returns show that in 1901 the district contained 2.148 inhabited towns and villages, and that of these 2,065 possessed less than a thousand inhabitants, 52 had between one and two thousand, sixteen between two and five thousand, and the remaining lifteen had populations exceeding five thousand persons. The number of towns in Bijnor is indeed remarkable. In addition to the five municipalities of Nagina, Najibabad, Bijnor, Chandpur and Dhampur, there are four towns containing over ten thousand persons, namely Kıratpur, Sheikot, Nihtaur and Scohara; the remaining six being Mandawai, Afzalgaih, Jhalu, Sahaspur, Haldaur and Tajpur. Besides these, there is the smaller town of Daranagar, which is a gasba administered under Act XX of 1856. The urban population, comprising the residents of these towns, amounts to 169,725 or 21.8 per cent. of the whole, and this figure is only exceeded in a few districts which possess large cities, such as Lucknow, Benares and Agra. The villages are for the most part very small, containing on an average 286 persons. In their nature and appearance they rather resemble those of the rest of Rohilkhand than the large and compact sites to be found

in the Doab districts to the west. The houses are almost invariably built of mud, with thatched or tiled 100fs, while those of the better class have flat mud roofs supported on rafters of timber. Brick houses are confined to the wealthrer zamindars, or else to the residents of the towns.

Of the whole population enumerated at the last census, Sex. 406.697 were males and 373,254 females. The latter thus constitute 47 8 per cent. of the total number of inhabitants, and this proportion has been closely approached at each previous census. As is the case almost everywhere, the number of females has increased somewhat more rapilly than that of males, for in 1853 they formed 45.7 per cent. of the population, the figure rising to 46 3 in 1872, to 46.9 in 1881, and to 47.8 per cent. ten years later. the succeeding decade showing no further change. In Gaihwal to the north females outnumber males, but in all the districts of the Meerut and Rohilkhand divisions the deficiency of females is very much more marked than in Dijnor. Within the district itself the variations are very remarkable. The disproportion is least in the northern tahsil of Najibabad, where 48.4 per cent. of the people are females, and greatest in Nagina, in which the corresponding figure is only 455 per cent. The Bijnor and Dhampur tahsils exhibit no great divergence from the general average, with 47.5 and 47.9 per cent. respectively. The reason for the inequality has not yet been determined, but remains a matter for speculation. The theory most commonly put forward is that of the influence of infanticide, and it is the case that among Musalmans females are comparatively more numerous than among Hindus, the figure for the former being 494, as against 47 per cent. in the case of the latter; while among the various Hindu castes none shows a greater proportional deficiency than do the Rajputs, whose females amount to only 44.3 per cent. of their total number. It is supposed that infanticide is now extinct; it certainly is so among the Jats, who were notorious for the practice in old days; but it is quite possible that its effects still leave their mark on the sex statistics, and it is indubitable that among the higher castes female infants receive less care and attention than boys. On the other hand, it is clear that other influences have been at work, for in 1872 the proportion of

females to the entire Hindu population was 45.6 per cent., and the corresponding figure for Musalman females 47.9 per cent.; so that in the period that has since elapsed the Musalmans have advanced more rapidly towards an equalisation of the sexes than their Hindu neighbours.

Religion.

This superior rate of progression is not confined to females alone. Bijnor affords a striking example of the almost universal rule that Musalmans increase more rapidly than Hindus. This is the result of greater longevity and higher fertility, and these factors have been ascribed to the use of a more liberal diet, and a superior style of living, rendered possible by the fact that, generally speaking, fewer Musalmans than Hindus are included among the poorest of the people. Possibly, too, the difference in the marriage age may have something to do with the result, though in these provinces there is no great difference between the customs of the two creeds. In 1881 Hindus numbered 67 13 per cent of the population and Musalmans 32.72; ten years later the proportions were 65.63 and 33.72 per cent.; and in 1901 the respective ratios were 63.83 and 34.84 per cent. The changes may not be wholly due to a difference in the rate of natural increase, as emigration may have influenced one party more than the other; but at all events they illustrate a general tendency. The returns of the last census show that the population was made up of 497,851 Hindus, 271,701 Musalmans, 5,730 Aryas, 1,933 Christians, 1,707 Sikhs and 1,029 Jains. No other district save Moradabad contains a larger proportion of Musalmans, and this phenomenon is the result of the general history of the tract.

ryas.

It will be more convenient to deal first with the less strongly represented religions. Among these the Aryas take the leading place, the followers of this creed being more numerous here than in any other district of the United Provinces except Bulandshahr and Aligarh. The movement originated here about 1881, and rapidly acquired strength. The founder, Swami Dayanand Saraswati, did not himself visit Bijnor, but several of his most prominent followers came to the district and gained many converts among the people. At the same time the spread of education materially assisted them, as the debased forms of Hinduism generally in existence had become insufficient for the more enlightened

classes, and all the materials for a religious revival were at hand. The preachers seized the opportunities afforded them by the various fairs, and especially that at Daranagar, where numbers of converts have been made. By 1891 there were 2,406 Aryas in the district, and in the ensuing decade a still larger number was added, in great measure owing to the exertions of Pandit Kripa Ram, who visited Bijnor about 1896. The first samaj was that at Bijnor, and this was soon followed by the institution of those at Nagina and at Muhammadpur Deomal in the Bijnor tahsil. Subsequently others were founded at Najibabad, Dhampur, Seohara, Chandpur, Tajpur, Nihtaur and a few other villages; and weekly meetings are regularly held at these places. The movement is said to be still gaining ground, but not very rapidly. Its adherents are drawn from many different castes: at the last census 1,841 were Banias, 652 Tagas, 472 Rajputs, 437 Brahmans and 424 Kayasths, the rest being chiefly Jats, Sonars, Rawas, Barhais, Nais and Faqirs. There were four or five schools maintained by the Aryas, and two girls' schools at Nagina and Najibabad; but the most notable institution of the kind is the gurukul at Kangri in pargana Najibabad, almost opposite Hardwar. This was started by the Arya Pratiuidhi Sabha of the Punjab, and was transferred in 1902 from Gujranwala to Kangri, the village having been made over as a gift by Munshi Aman Singh. This gurukul was founded with the object of reviving the ancient system of teaching, and now contains some 150 boys between the ages of eight and seventeen, the period of education terminating at 24. The scheme of education embraces Hindu philosophy, science, and art as well as modern subjects. The institution is lodged in a temporary building, but a very ambitious scheme is contemplated, involving the expenditure of some six lakhs, including the proposed medical college.

Of late years Christianity has spread with some rapidity, Christas is the case throughout Rohilkhand, though the number of converts in Bijnor is still inconsiderable. Of all the Christians enumerated at the last census in this district, 1,853 were natives, this figure having risen from 274 in 1881 and 866 in 1891. No fewer than 1,824 were Methodists, while of the remainder 13 were Anglicans, 13 Roman Catholics, and three returned no

specific denomination. There is no Anglican Church in the district, but the headquarters station is visited four times yearly by the Chaplain at Rooikee. The only proselytising agency is that of the American Episcopal Methodist Mission. This has its headquarters at Bijnor, where work was first started in 1860, and also possesses out-stations at Nagina, Najibabad, Bashta, Mandawar, Nurpur, Dhampur and Bashta. The mission has established six churches in the district, and holds house and other property to the value of Rs. 17,245; there are eleven ministers, both European and native, as well as a large staff of native readers and teachers. As elsewhere, the mission devotes itself largely to education and medical work; in addition to a flourishing boarding-school for guls at Bijnor, there are at the out-stations 30 schools for Loys and 17 for guls, with some 400 and 200 scholars respectively, as well as 54 Sunday schools in which religious instruction is given to about 1,700 children. It was estimated that in 1906 the total number of adherents was nearly 3,500, so that a large increase may be expected at the next census. The native Christians are for the most part drawn from the lower classes, but there are several exceptions to this rule, the most notable converts being Raja Sham Singh and Kunwar Sheonath Singh of Tajpur.

likhs and ains.

As is generally the case in these provinces, the Sikhs are for the most part Chamars under another name, no fewer than 960 out of a total of 1,707 being thus described. Of the rest, 423 were Jats, whose forefathers embraced the Sikh religion, probably before their migration eastwards, and others belong to various castes. Some are Punjabi Sikhs, who are employed in the police and other Government service. The Chamar Sikhs belong almost exclusively to the Nagina tahsil, and the bulk of the remainder to Bijnor. The Jains are scattered about the district, chiefly in the trading centres, and with very few exceptions are of the Bania caste, and principally of the Agarwal subdivision. They differ but little from their Hindu brethren, and their creed is probably more a matter of tradition than of any definite schism from Hinduism.

Ludus.

Comparatively few of the Hindus of this district profess adherence to any particular sect or denomination. An attempt

was made at the last census to discover the relative position of the different forms of worship and belief, but the results were disappointing, because the great majority of Hindus recognise no sectarian divisions. About 11 per cent. were returned as belonging to sects of Vaishnavism, 8 per cent. as monotheists and 7.6 per cent. as Salvites. These figures are in no way remarkable, and the only sect that calls for comment is the Vaishnavite form followed by the Bishnois. These numbered 23,175 souls, or more than in any other district of Rohilkhand, the total being surpassed only in Agra, Aligaih, Meeiut and Muzaffarnagar. The sect is said to have been founded some four centuries ago in Marwar by one Jhamaji, otherwise known by the Muhammadan appellation of Sheikh Makhdum Jahania Jahangasht. Till recently, his followers used to adopt Musalman names and customs; but these have been renounced, and the Bishnois differ little from strict Hindus, being particular in matters of ceremonial purification and having as strong an aversion to taking life as the Jains.

Though generally at one in the matter of religion, the Hindus of Bijnor have many divisions. Members of no fewer than 66 castes were enumerated at the last census, while in the case of 643 persons no caste was specified. Many of these are, it is true, comparatively insignificant, for 27 castes had less than 500 representatives, and 20 others less than 5,000. The fourteen castes with 10,000 or more members apiece constitute nearly 86 per cent. of the Hindu community, and few others are of much importance, although several of them are interesting ethnographically, as being found in comparatively large numbers in Bijnor. Still there are no castes peculiar to this district, which in its tribal distribution closely resembles the Meciut division and the other parts of Rohilkhand.

As is so often the case, Chamars take the lead in point of Chamars numbers, aggregating 118,205 persons or 23.74 per cent. of the Hindu community. They predominate in every tahsil, except Dhampur, in which they give place to Rajputs, and are fairly evenly distributed. They form the bulk of the labouring population, seldom owning land, and appearing somewhat rarely as tenants, though most of them are engaged in agriculture, in many

cases doing the manual work in the fields for Brahmans and Rajputs. They seem to be of aboriginal descent, and are cut off from the rest of the Hindus in matters of religion and the social economy of the village, generally residing in hamlets of their own, known as *chamrawati*.

Rajputs.

Next come Rajputs with 72,396 representatives or 14:54 per cent. of the Hindus. This is a high figure, exceeded in no other district of the Rohilkhand division, but at the same time the returns are misleading, for the total includes a great many who are almost indisputably of other than Rajput origin. More than half of the Rajputs belong to the Dhampur tahsil, and the bulk of the remainder to Nagina: there are but 10,000 in Bijnor and little more than 4,000 in Najibabad. The records of the last census show that no fewer than 61,443 of the Rajputs were Chauhans, 30,223 of these belonging to the Dhampur tahsil, 19,766 to Nagina, 8,110 to Bijnor and 3,344 to Najibabad. Some of these Chauhans are no doubt of genuine Rajput descent and are recognised as such by the other clans; among them are the wellknown families of Sherkot, Haldaur, and elsewhere. But the great majority are practically a separate class, and can only be described as Rajputs by courtesy. In character and origin they resemble the Gujars, and make no claim to be considered the descendants of Prithvi Raj, the last Hindu king of Dehli, from whom spring the great houses of Mainpuri, Partabner, and other places in the Agra division. They are endogamous—a fact which sufficiently disproves the assertion of Chhattri descent, although they possess several improbable traditions, one account stating that their ancestors crossed the Indus in 1586 with Maharaja Man Singh and therefore lost caste, while another attributes their advent to persecution and migration hither under Raja Tatar Singh in the days of Humayun. These Chauhans, who are mere cultivators and are also found in large numbers in the adjacent districts of Muzaffarnagar, Meerut, and Moradabad, are divided into three classes, known as Chaudhri, Padhan and Khagi, while further subdivision resolves them into Gahlots, Pramars, Bais and so forth. The Chaudhris are the highest and will not give their daughters to the other classes, and the Khagis, who are confessedly the lowest, permit widow marriage and the levirate.

Excluding the Chauhans, the number of Rajputs becomes insigni-Very few clans are represented in any strongth, the chief being the Jadons, 1,227, almost all of whom were enumerated in tahsil Dhampur, and the Kachhwahas, of whom there were 1,054, all residing in the Dhampur tahsil; they appear to be akin to their namesakes in the Muzaffarnagar district. Next come Gahlots, 665, mainly in tahsil Bijnor; Jaiswars, 515, in Dhampur; Tomars, 370, in various parganas; and Gaurs, Bargujars and Chandrabansis, also in Dhampur. None other occurred in numbers exceeding 200, at any rate of the clans specified in the census report. No fewer than 5,284 are included under the heading of 'other Rajputs' and among then come Seles, Ghaghis, Hatehs. Nagbansis, Pansaras, Sirohis and Tarkhars, all local sents of small status and no historical importance. It is curious that only three persons were enumerated as Katehiiyas, though this clan is still numerous in other parts of Rohilkhand, and especially Moradabad: it seems probable that the designation of the Rapput inhabitants of the country by the Musalman historians was rather territorial than tribal. As will be noticed horeafter, the Rajputs are the chief landowning caste in the district and hold more land, either as proprietors or as tenants in almost every pargana.

The third place is taken by the Jats, of whom 55,220 or Jats. 11.09 per cent. of the Hindus were enumerated. strongest in tabsil Bijnor, which contained no fewer than 28,229, and fewest in Nagina with 6,028, the rest being divided equally between the two remaining subdivisions. The caste is mainly confined to the western districts, and in the Robilkhand division the great majority belong either to Bijnor or Moradabad, into which they appear to have migrated from the Doab. In this district they belong for the most part to three classes, known as Chaudhris, Deswalis, and Pachhades. The first are the least numerous, and claim descent from the Gahlot Ranas of Mewar, asserting that their ancestors came to Bijnor about three centuries ago: like Chauhan Chaudhris, they allow their sons, but not their daughters, to marry into the inferior septs, and they style themselves Kholi Ranas, as a testimony to their exalted lineage.

Deswalis comprise by far the largest number. Their chief family is that of Sahanpur, which is said to have come from Jhind in the sixteenth century. The Pachhades are comparatively scarce in this district, and have no intermarriage with the others. The most famous of them was an eunuch and a Musalman, Khwaja Almas Ali Khan, who rose to high office under the Nawab Wazirs of Oudh, and administered Rohilkhand for some years, shortly before its cession to the British. The Jats are cultivators of a high order, and own about one-sixth of the district, their largest estates being in pargana Najibabad.

Brahmans.

The number of Brahmans is proportionately very low, and indeed is surpassed in every other district, except Dehra Dun and Pilibhit. At the last census there were 26,422 members of this caste, constituting 5.31 per cent. of the Hindu population, as compared with a provincial average of 11.5 per cent. Twothirds of them are equally divided between the Bijnor and Dhampur tahsils, and the remainder are similarly distributed over the rest of the district. The immense majority are described as Gaurs, the other subdivisions being but sparsely represented; the principal are Saraswatis, Kanaujiyas, and Sanadhs. They are mainly agriculturists, but their skill as husbandmen is not great, and the occupation is frequently considered derogatory to their dignity; a more congenial calling is the priesthood, supported by offerings, alms, and the peculiar perquisites of the caste. They own a fair amount of land, especially in the Bijnor tahsil. The Tagas, of whom 8,207 were enumerated, claim to be Brahmans, and to some extent are admitted as such, their position being analogous to that of the Bhuinhar Brahmans of the eastern districts. Half of them reside in the Dhampur tahsil, and there they acquired the important Tajpur estate, as well as several smaller properties, such as Nihtaur. They are capable cultivators and not ashamed to till the land. The great stronghold of this caste is the Meerut district, but they are also very numerous in Moradabad. Like the Jats, they have many subdivisions, but the only two of importance in Bijnor are the Bissas and Dassas, the latter being considered of impure descent.

Then come two purely agricultural castes of a distinctive Malis and character and closely resembling one another. These are the Malis and Sainis or Sanis, the former numbering 23,268, and the latter 19,619 souls. Malis, who often go by the name of Baghban, occur in every district, but the total here recorded is only exceeded in Moradabad and Saharanpur; they are most numerous in the Dhampur tahsil, and are somewhat scarce in Najibabad. The majority of the Sainis, on the other hand, reside in the Bijnor and Nagina tahsils: they are not found elsewhere in Rohilkhand. almost all the other members of this caste belonging to the Meerut division and in particular to the Muzaffarnagar district. The two castes are almost identical, having the same manners and customs, and indeed the Sainis or Sanis admit their Mali descent: both are market gardeners by tradition, but at the same time they engage largely in general farming, and are the most skilled and careful of all the cultivating castes. In this district they take the place of the Muraos, Kachhis, and Koeris of other parts, these castes occurring in very small numbers in Bijnor.

The Banias numbered 19,986 souls, and are very evenly Banias. distributed throughout the district. Most of them are traders and moneylenders by profession, though not unfrequently they betake themselves to agriculture, and as landowners they are steadily improving their position. Many Banias belong to the Bishnoi sect, to which some reference has been already made. Of the various subdivisions of the caste the chief is the Agarwala, with 9,588 representatives, this clan predominating in every tahsil: they are further subdivided into Bissas and Dassas, the latter being considered the inferior. Next come Mahesris, 1,228, chiefly in Najibabad and Dhampur; Rustogis, 863, and Barasenis, 764, in the same tahsils. There are also many Khandelwals, as well as a number of other sub-castes, such as the Gindauriyas, Lohiyas and Rohtakis, who are almost wholly confined to this district and Meerut.

Few of the remaining castes call for any special mention. Other Those with more than 10,000 members apiece comprise Kahars, 16,461; Barhais, 15,388; Gadariyas, 15,202; Kumhars, 11,323; Bhangis, 10,993; Koris, 10,593; and Gujars, 10,162. All these

are evenly distributed, except the last, who are mainly confined to the Dhampur and Bijnor tahsils, whither they are said to have migrated from Gujarat in the Punjab during the days of Najibud-daula, from whom they obtained a considerable grant of land in pargana Daranagar. The others are found in every district and are too well known to require description. The Rawas, of whom there were 9,737, are more numerous in Bijnor than in any other district; they do not occur elsewhere except in the Meerut division and in the parts of Agra and Muttra beyond the They are cultivators of a high order, and are practically confined to the Najibabad and Bijnor tahsils, and especially to the Najibabad and Mandawar parganas, where they rank equal with the Sainis. Little is known of this caste, but they themselves claim to be degenerate Rajputs and to have settled in Bijnor during the days of Shahjahan. The other castes exceeding 5,000 in numbers are Nais, Tagas, Ahirs and Faqirs, of whom nothing further need be said; and after them come Sonars. Kayasths, Dhobis and Ramaiyas. There are remarkably few Kayasths in Bijnor, as is also the case in the northern tracts of, the Doab: they belong mainly to the Bhatnagar subdivision, which predominates in this district and Moradahad, while the rest are chiefly Saksenas and Mathurs; the Kayasths are considerable landowners, especially in pargana Dhampur, but the bulk of them follow their traditional calling as patwaris or village accountants. The Ramaiyas, of whom 2,194 were here enumerated out of a provincial total of 3,158, belong almost wholly to the Dhampur tahsil: they are pedlars by profession, travelling all over India, and lead a wandering life, this being the only district in which they have settled down in any number; they inhabit some forty villages, mostly in the neighbourhood of Nurpur. In religion they more closely resemble Sikhs than Hindus, though very few of them were entered as such; as a rule, they profess to be of Brahman descent, but their reputation is not of the best. The Dakauts, numbering 1,919 and found in all tahsils, are also more common in Bijnor than elsewhere: they, too, are inferior Brahmans, and live chiefly by begging. Banjaras or grain-carriers, Chhipis or cotton printers, Khatiks, Meos and Dhunas or cotton-carders occur in considerable numbers,

but are by no means confined to Bijnor; nor is it necessary to say more regarding Khattris, Lodhs, and Bharbhunjas or Bhurjis, who aggregated more than a thousand members apiece. Khattris hold a good position, and by their success in trade have acquired a fair amount of land in Nihtaur, Najibabad, Bijnor and other parganas. One or two of the minor castes may be incidentally noticed. There were 685 Orhs, chiefly in the Bijnor and Nagina tahsils, this being the only district of Rohilkhand in which these people are found: they appear to be related to the Koris, and most of them are weavers, though they also indulge in money-lending and agriculture. Kutas are lare everywhere except in Moradabad; here they numbered 363, almost all being residents of the Nagina talisil; they are cultivators by profession, but their peculiar occupation is that of husking rice. Hindu Kunjras were found to the number of 417 in the Dhampur tahsil; they occur in few districts, but do not differ from their Musalman brethren. In pargana Afzalgath 228 Bhuksas were found, this caste only occurring elsewhere in the Tarai parganas of the Kumaun division.* Mention may also be made of the Kambohs, of whom there were 193, most of the people thus styled being Musalmans, though Hindu Kambohs are not uncommon in the Meerut division and Moradabad; and of the Kanchans, who numbered 41 out of a provincial total of 65, the rest, curiously enough, being residents of Unao. But as a matter of fact, the Kanchans are merely Nats under another name, and bear the same equivocal reputation, being usually musicians who accompany dancing-girls; the only noteworthy feature in this connection being that such people usually profess the Musalman faith.

The great majority of the Musalmans belong to the Sunni Musalsect, which numbers 958 per cent. of the whole Muhammadan community. Of the rest, 28 per cent are Shias, 1.3 per cent. Lalbegis, and a very few Wahabis or else followers of Ghulam Ahmad of Qadian. The Lalbegis are only Musalmans by courtesy, as this style is adopted by sweepers who have nominally embraced Islam. The Shias are mostly Saiyids by race, and are far less numerous than in Muzaffarnagar and Moradabad.

mans.

^{*} Gazetteer of Namı Tal, p. 109

Proselytism is almost unknown, and the number of recent converts is quite insignificant. Classified by tribes and castes the Musalmans of Bijnor present as great a diversity as their Hindu neighbours. The census returns include representatives of no fewer than 63 different castes, excluding subdivisions, while as many as 920 persons are entered as unspecified. In eight instances the total exceeds 10,000, these aggregating 69.2 per cent. of the whole; and 21 more have more than 1,000 members apiece. A greatmany have their Hindu counterparts and are of no interest or importance, but several occur in unusual numbers, being more strongly represented here than in other parts of these provinces.

Sheikhs.

The foremost place is taken by the Sheikhs, of whom there were 59,194, or 21.8 per cent. of the whole Musalman population. They are most numerous in the Bijnor tahsil, where they far outnumber any other caste, while in Nagina and Dhampur the Julahas preponderate. There can be no doubt that the great majority of the Sheikhs are of Hindu origin, and it has been suggested that the converts adopted the class of their proselytizers, the latter being Sheikhs who held the offices of quzi and mufti in the various parganas, the conversion of infidels being one of the principal duties of these functionaries. And as the new followers of Islam styled themselves Sheikhs, so were they necessarily bound to enrol themselves in one of the recognised subdivisions of that tribe. Thus it comes about that their descendants are called by names which are of Arabian origin and were derived from the founders of the Khalifate. The great majority describe themselves as Qurreshis, these numbering 30,962 and predominating in every tahsil, and next to them come Siddiqis, 19,005. The others are less common, and include Ansaris, 3,903, chiefly in Bijnor and Najibabad, this figure being unusually high and only exceeded in Moradabad and two other districts; Faruqis, of whom there were but 268; Bani Israil, 187, all in Dhampur; Abbasis, Usmanis, and several more less generally known. The Sheikhs are one of the chief landholding classes in this district, their most extensive possessions being in the south of the Bijnor tahsil; they are mainly agriculturists, and occupy a prominent position among the tenants.

The second place is taken by Julahas, of whom 56,506 were Julahas enumerated, or 208 per cent. of the Musalmans. They correspond to the Hindu Koris, and still for the most part follow their ancestral industry of weaving, which has suffered less in Bijner than in most districts under the influence of foreign competition. Their chief centres are the Dhampur and Nagina tahsils, but they occur in strength throughout the district, often working as cultivators and attaining a fair proficiency as husbandmen. The total number of Julahas is remarkably large, and is only exceeded in Gorakhpur, which has an immensely greater population. Behnas or cotton-carders, who are very nearly akin to them, Behnas, are also very strong numerically, aggregating 11,827 souls, and being similarly distributed over the district. They, too, follow their traditional occupation, as it goes hand in hand with weaving. Neither of these castes occupy a high social position, and the same remark applies to the Telis or oil-pressers, who are so Telis. numerous through the Meerut and Rohilkhand divisions. Here their total was 14,992 or 5.5 per cent. of the Musalman inhabitants. They reside in all parts of the district, the largest number belonging to the Dhampur tahsıl.

Saryids.

Few districts possess so large a Saiyid element as Bijnor, where 12.425 persons of this race were found at the last census. The number is constantly on the increase, as the title may be inherited from either parent; but they are probably of purer descent than any other class of Musalmans. Many of them claim connection with the Barha Saiyids of the Muzaffarnagar district. whence their ancestors migrated after the great catastrophe which befel the clan when Jansath was destroyed in 1739. They settled at Nagina, Chandpur and several other places, and at various times acquired large estates. Of the various subdivisions the strongest are the Husaini and Zaidi, with 5,415 and 3,349 representatives respectively; no others are of any importance, though Bukharis, Taqwis, Rizwis and Jafaris are found in fair numbers in the Najibabad and Bijnor tahsils. Among the other tribes not separately detailed at the census are the Chishtis and Tirmizis. who are more common in Bijnor than elsewhere: the former belong to the same family as the celebrated saint Salim Chishti, whose tomb is the chief glory of Fatehpur-Sikri.

Pathans.

The number of Pathans, on the other hand, is surprisingly small, in view of their complete supremacy during the eighteenth century. The reason molably lies in the fact that many migrated when the Rohilla power was broken, and still more are said to have left the district after the Mutiny. They numbered 11,606 persons in all, and are naturally strongest in the Najibahad They still hold considerable estates, in spite of numerous confiscations for rebellion, their largest properties being in pargana Nagina. Many different tribes of Pathans are found among them, but the Yusufzai with 3,160 representatives alone occur in There were 548 Kakais, chiefly in Najibal ad; any strength. 441 Lodis and 323 Rohillas, though the last is rather a generic term than the name of a specific clan. The Muhammadzai, Ghori and Bangash also possess over 200 members apiece, but the majority of the Pathans come under other heads than those recorded in the census report, and belong either to indefinite subdivisions such as Afghan, or to those which are found but rarely in these provinces, as the Sarwam and Barukhel.

Other Musalmans.

Excepting Fagirs, 12,098, and Nais or Hajjams, 10,330, no other castes present a total of more than 10,000 persons. next in order are Qassabs, Dhobis, Jhojhas, Darzis, Rajputs, and Chhipis, these totalling in each case over 5,000. The Jhojhas are not found elsewhere in Rohilkhand, and here numbered 6,084, half of them residing in the Bijnor tabsil, this figure is exceeded only in Saharanpy and Muzaffarnagar, where this tribe of excellent cultivators, of similar nature and origin, perhaps, to that of the Hindu Chauhans, scem to have their home; they believe themselves to be converted Rajputs, though the claim is not admitted by others. If they are right, there is very little difference between them and the people classified as Musalman Rajputs in this district, as the latter are mainly of Chauhan descent, though several other clans are represented, the chief being Panwars and Bhattis in the victim tabils, and Gahlots in Dhampur. remaining castes are for the most part identical in name and character with the Hingus. Those known by the appellation of Lohar. Bhangi, Bhishti, Kumbar, Panjara, Manihar, Raj, and Barbai, each exceeding 2,000 souls. They are all more than ordinarily numerous, lut the Raj community alone exceeds the total for any

district, there being 2,329 persons of this caste, chiefly in the Nagina and Dhampur tahsils. By occupation they are masons and bricklayers, and as often as not, are of Chamar extraction. Musalman Mallahs and Kahais are again more common here than elsewhere, and the same may be said of several of the less widely known castes, such as Bisatis and Ramaiyas, both pedlars by profession, Bansphors or workers in hamboo, Kadheias or Musalman Malis, Baghbans, who are practically the same, and Lodhs, who are well enough known in their unconveited state. The criminal tribes are fairly well represented, notably in the case of Bauriyas, Bijnor furnishing 96 Musalman members of this caste out of the provincial total of 98. The latter figure is doubtless short of the mark, for the Bauriyas are no whit behind other castes of like habits in euphemistically changing their designation to suit the requirements of the moment.

In the matter of occupations Bijnor holds a somewhat peculiar o cupaposition. Agriculture is, of course, the principal form of employment, but according to the census returns only 50 72 per cent. of the inhabitants were directly dependent on cultivation, and this figure also includes pasture and the care of animals. The proportion is extremely low, as compared with a provincial average of 654 per cent., and only the two districts of Saharanpur and Aligath, each of which contains large cities, show a smaller figure. The reason no doubt lies in the presence of so many considerable towns, in all of which there is a fair amount of commercial industry, and also in the fact that so large an area is covered by forest and out of cultivation, affording other kinds of employment to the dwellers in the vicinity. On the other hand, the proportion must be considered in some measure short of the mark. Very many persons devote some of their time to agriculture, although their chief source of subsistence is shown under other heads: the census returns give but 64 per cent. of the inhabitants as partially agriculturist, but it is certain that this figure is quite inadequate. Still the results obtained in the case of the other main heads are very significant. The industrial population constitutes no less than 23.7 per cent. of the whole, and is proportionately greater than in any other district. Among the various forms of industry, those connected with textile fabrics and dress accounted

for 40.77 per cent. of the people coming under this head; the supply of food, drink, and stimulants 263 per cent; wood, bamboos and other jungle products 12 42 per cent.; while of the others the most important include metal-work, pottery, and work in leather. The professional population also is larger in Bijnor than elsewhere, aggregating 2.94 per cent., Muttra alone showing a higher figure. Religion bulks largely under this hearling, the rest pertaining principally to law, medicine, and education. Commerce, transport, and storage contribute 2.22 per cent., the first of these accounting for about half of the total, while the others include the railway service, post-office, carters, owners of pack-animals, and the like. Personal and domestic service and unskilled labour other than agricultural make up 8.12 per cent. in each case, and Government service in its various aspects 1.2 per cent. This leaves 298 per cent. with no occupation, this category being of a very miscellaneous character, the component population ranging from independent gentlemen and pensioners to beggars and those entertained in the jail at His Majesty's expense.

Language. The common tongue of the people is the Urdu or Hindustani dialect of Western Hindi. It has sometimes been classified separately as Rohilkhandi, but there is really no marked distinction in idiom or vocabulary between this and Hindustani. The last census returns show that the entire population, with the exception of a minute fragment or 740 persons in all, gave Western Hindi as their mother-tongue, and there is no district in the United Provinces in which Urdu is more widely spoken, both by the peasants and the educated classes. The other languages enumerated were Punjabi, Pahari, Marwari, Bengali and English, the last occurring in 35 cases only.

Laterature. The district has produced no persons of any literary distinction in the past, and at the present time Bijnor can boast of nothing beyond a few newspapers of little influence or merit. There are no literary or political institutions, and no attempts have been made to foster indigenous arts and letters. The newspapers have, for the most part, a precarious existence and a very limited circulation: they contain local news, excerpts from other papers, and discuss social, religious, and political matters, not

unfrequently exhibiting bias against the Government. Such are the Qulqul, the Sahifa, and the Tohfa-i-Hind, Urdu weeklies with a circulation varying from 300 to 400, and published at Bijnor. There is also a weekly journal, dealing with legal matters, known as the Risala Taza Nazair, and a monthly magazine called the Zamindar wa Kashtkar, which is owned by Muhammad Khalil-ur-Rahman of Mandawar, and deals with agricultural questions. The only paper now published outside the headquarters town is the Upkar of Nagina, which appears at intervals and is distributed free of cost; it is owned by a Jat of that town and contains merely local news. There are four or five lithographic printing presses at Bijnor, one at Nagina, and one at Najibabad; most of them have changed hands frequently, each time appearing under a new name.

The tenures of land in Bijnor present no peculiar features. being identical with those prevailing throughout the United The chief characteristic of the district is the pre-Provinces. dominance of the large proprietors, a comparatively small number of persons owning the greater part of the area. To the same fact may be attributed the slight increase, as compared with other districts, in the number of mahals. for the great estates have remained almost intact, and the partitions and subdivisions have been practically confined to the smaller landholders. In 1906 the 2,981 villages of the district were divided into 5,853 mahals, as compared with 5,260 at the last settlement, and 3,364 in that of 1866-73. Of the present number 1970 are the property of single owners, 2,692 were held in joint zamindari, 225 were perfect, and 323 imperfect pattidari, 398 were held in bhaiyachara tenure, eight were the property of Government, and 237 were revenue free, most of them being single zamindarı mahals. The bhaiyachara form, and indeed all the coparcenary tenures, are found chiefly in the Bijnor and Dhampur tahsils, but in every case they are relatively unimportant, and in all parganas zamındari holdings largely prevail. It is noteworthy that recent partitions have been generally perfect, the number of perfect pattidars mahals having increased from 146 at the last settlement to the present figure, while the other forms show little change. Mention may also be made of the fact that in this district the bhavyachara tenure is usually

Proprietary tenures.

Proprietary castes.

called lanadari, the word lana being used to denote a share.

As regards the areas held by the different castes the latest reliable returns are those of the supplementary settlement report of 1903. Since that date there has been some small change, though of no great importance, and the general distribution has remained unaltered. The proprietary community is extremely varied, and comprises a very large number of different castes, but if those with small scattered holdings be eliminated, there remain comparatively few communities, and these are in possession of the major portion of the district. The foremost place is taken by the Chauhans, who now own 245 per cent. of the area: they are predominant in the Bijnor and Dhampur tahsils, but occur throughout the district, and have lost but little in the past forty years. Next come the Jats with 16.3 per cenue, their position being largely due to the inclusion of the wide domains of the Sahanpur family: the caste has lost ground rapidly, especially in the case of the smaller owners. Tagas hold 12.6 per cent., this being made up chiefly of a few large estates, which have slowly increased. Banias are now in possession of 11.3 per cent., of the area, and between the two last settlements added 29,056 acres to their holdings, usually at the expense of the poorer communities, though the process was hastened by the sale of a large Pathan property. Next follow Sheikhs with 10.3 per cent., or rather less than formerly; Saivids with 6.9, showing a distinct increase; Brahmans, with 27: Bishnois, with 2.6; and Pathans, with 2.2 per cent. The three last have lost somewhat heavily, and especially the Pathans. whose estates have diminished by more than 15,000 acres. Gujars, Kayasths, Khattris and Rawas together hold 5 per cent., the Kayasths alone having lost, while the others have improved their position. There remains 5.7 per cent. in the possession of other castes, chief among whom are the Rainuts, the bulk of whose holdings is included in the Kashipur estate. Further details will be found in the several pargana articles.

Jats of Sahanpur.

The Sahanpur family is said to have been founded by one Nahra Singh, a Jat of Ramraipur, near Jhind, in the Punjab. His son, Basru Singh, left the ancestral home in 1600 and settled at Bahadurgarh in the neighbourhood of Dehli. Tegh Singh-or

-Padarath, the youngest son of Basru Singh, gained the favour of Jahangir, and obtained in 1603 the grant of 360 villages in the parganas of Jalalabad, Kıratpur and Mandawar, together with the title of Rai, which is to this day held by the family as an hereditary distinction. Proceeding to his jagur, with several members of his family, he founded Nagal in 1604, and two years later built the fort of Sahanpur. Another version of the story is that the Jats migrated hither on the overthrow of the Suris by Humayun, and that Padarath won his estate as a reward for his services to Jahangir during a hunting expedition in the vicinity of Hardwar. Padarath died in 1631, and was succeeded by Rai Bhim Chand, the second of his five sons. This man died without issue, and the estate passed to Nathai Singh, the son of his youngest brother. He was followed by his brother, Rai Sabal Singh, who gave his name to the fortress of Sabalgarh, and left three sons; the first two predeceased their father, and the property passed to Rajaram Mahabeli. The latter had two sons, of whom Tara Chand succeeded, but on his death in 1753, the estate was taken by his brother, Sabba Chand, instead of devolving on his son Jaswant Singh. Rai Sabba Chand seems to have been a man of energy, and made large additions to his domains, which are said to have embraced 1,787 villages. He died in 1784, and then Sahanpur was held for a year by Jaswant Singh, who had no children, and was succeeded by Rai Ram Das, the eldest son of Sabba Chand. He again left no issue, having been killed in the year of his accession in a fight with the Pathans while defending Sahanpur. The next incumbent was his brother, Rai Basu Chand, who held the estate for eleven years and died in 1796. His elder son, Khem Chand, was murdered two years later, and the younger, Tapraj Singh, came into possession, holding the estate when Bijnor was ceded to the British, and retaining it till his death in 1817. Once again the eldest son, Rai Jahan Singh, met with a violent death, being killed in an affray with dacoits in 1828, and the property passed to the youngest brother, Rai Himmat Singh, who continued to hold Sahanpur for 45 years, dying in 1873. The elder son of Himmat Singh was Rai Umrao Singh, who died in 1882, and then the property was taken under the Court of Wards during the incumbency

of his brother, Rai Dal Chand. It was released on his death in 1897, and made over to his eldest son, Rai Partab Singh who died in 1902, leaving a minor son, Rai Datt Prasad Singh, otherwise known as Aftab Jang. The property is managed by his uncle, Kunwar Bharat Singh, the present actual head of the family. It consists of 90 villages in pargana Najibabad, 35 in Kiratpur, 18 in Akbarabad, 20 shares in Mandawar and one in Bashta, with a total revenue demand of Rs. 51,935.

The Tajpur family.

The only other titled family is that of the Tagas of Tajpur. This is of comparatively recent origin, the first member to rise to prominence being Balram Singh, who about the beginning of the 18th century acquired large estates in the Azampur portion of pargana Bashta. His son, Ram Kishan, purchased land in the neighbourhood of Tajpur, and removed the family residence to that place. He was succeeded by Kidha Singh, who made further additions to the property, and was in possession when the district was ceded in 1801. Five years later he rendered good services to Government during the incursion of Amir Khan Pindari, and in reward obtained the estate of Gopalpur. He was followed by Jairaj Singh, who died young and left the property to his son, Partab Singh, who was styled Chaudhri of Tajpur. During the mutiny this man rendered signal services to Government, incurring thereby great personal danger and loss, as will be narrated in the history of the district. As a reward he received the title of Raja Bahadur and a grant of villages assessed at Rs. 2,500, while the Tajpur estate, comprising six villages, was freed from revenue for his lifetime, with the remission of half the demand during the life of his successor. Raja Partab Singh died in 1873, and was succeeded by his eldest son, Jagat Singh, on whom the title was again conferred as a personal distinction. At his death in 1885, the property passed to his brother, Sham Singh, who was educated in England and has embraced the Christian religion. He was awarded the title of Raja in December 1888, and the honour was declared hereditary ten years later. For a time the Raja was a member of the provincial civil service, and is now an honorary magistrate of the second class for the police circles of Chandpur, Bashta, Nurpur, Sherkot, Dhampur and Seohara. His property is widely distributed.

and comprises 25 villages and shares in five others in pargana Burhpur, ten villages and one share in Nihtaur, eight villages and one share in Dhampur, seven villages in Bashta, five villages in Chandpur, and one village and two shares in Daranagar; the total comprises 56 villages and nine shares, with a present revenue demand of Rs. 15,947. His younger brother, Kunwar Sheonath Singh, is also a Christian, and for years resided in England, where he qualified himself as a barrister-atlaw. He resides at Tajpur in a house which he has built in the English style, and owns a large property, comprising 39 villages and shares in 33 others in the four parganas of the Dhampur tahsil and in Daranagar, Chandpur, Bashta and Afzalgarh, the total assessment being Rs. 29,674. Raja Jagat Singh left two sons, of whom the elder, Kunwar Randhir Singh, after twelve years residence in England settled in the Rambagh Kothi at Tajpur. His share of the estate consists of 14 villages and four parts in Dhampur, and 15 villages and eight shares in Afzalgarh, with a revenue demand of Rs. 19,115. Kunwar Digbijai Singh, his younger brother, who lives at Roshanpur near Nagina, owns 19 villages in Nagina, and seven villages and one share in Nihtaur, paying a revenue of Rs. 13,267.

Another well-known family is that of the Chauhans of Hal- Haldaur, daur, where they claim to have been settled since the days of the Musalman conquest. They have always been styled Chaudhis, but no member of the family attained distinction under native rule, with the exception of Chaudhri Bakht Mal, during the time of the Rohilla domination. The first person of real importance was Chaudhri Man Singh, who acted as chakladar when the district was under the Nawab Wazirs of Oudh, and held a very large estate on farm, in most of which he subsequently became recognised as proprietor when the district was ceded to the British. His grandson, Randhir Singh, remained loyal during the mutiny, and was engaged in constant fighting with the Pathans. He was rewarded with the title of Raja, together with a remission of revenue on his estate under conditions similar to those of Tajpur. He died in 1861, and was succeeded by his nephew, Maharaj Singh, who in 1878 received the title of Raja as a personal distinction. On his death the property was divided into two

portions, one of which descended to his son, Kunwar Partab Singh. The latter died, leaving his estate very heavily encumbered: it is now managed by his younger brother, Kunwar Tejbal Bikram Singh, but it is not yet in a satisfactory condi-The property comprises nine villages and 17 shares in Daranagar, nine villages and two shares in Nihtaur, one village and two shares in Bijnor, two villages in Bashta, portions of two villages in Mandawar, and single villages in the three parganas of the Najibabad tahsil; the whole comprising 24 villages and parts of 23 others, with a revenue of Rs. 19,766. The other portions of the estate went to Kunwar Harbans Singh, the nephew of Maharaj Singh, who is a landlord of great ability and has maintained his estate in a flourishing condition.* It includes eight villages and 22 shares in Daranagar, 20 villages and eight shares in Nihtaur, three villages in Nagina, two shares in Bashta. and one each in Chandpur and Bijnor, making in all 33 villages and 39 shares, with a revenue of Rs. 25,113.

Chaudhus of Sherkot.

One of the largest proprietors in the district is Chaudhii Ranjit Singh, Ran Bahadur, of Sherkot, the head of an old and respectable family of Chauhans, who have been settled in Sherkot for several centuries. One of his predecessors, Chaudhri Umrao Singh, took a prominent part in the mutiny, driving the Pathans out of Sherkot, of which he had been temporarily dispossessed: he received in reward a large grant of confiscated property, and the estate has recently been increased by the purchase of land belonging to the late Saiyid Jafar Husain in the parganas of Chandpur and Bashta. Chaudhri Ranjit Singh, who is an honorary magistrate for the Dhampur and Sherkot police circles, and received the title of Rai Bahadur in 1898, is an adopted son of the late Chaudhri Ghasa Singh; he is a man of great public spirit, and has done much for municipal administration in Dhampur. His property comprises 75 villages in pargana Dhampur, 34 in Afzalgath, six in Nihtaur, four villages and eight shares in Burhpur, one village and 11 shares in Chandpur, and one village in Bashta, with a total revenue of Rs. 82,042.

Chaudhris of Seohara. Another family of Chaudhris is that represented by Rai Basant Singh Bahadur of Seohara. He belongs to a Taga

^{*} Harbans Singh received the personal title of Raja in 1908.

family and resides in a fine house at Seohara built by Chaudhri Zalım Sıngh. Hıs great-grandfather, Chaudhri Jwala Singh, was one of the loyal Hindu zamındars who distinguished themselves in the mutiny, and he himself is a prominent member of the district board, and is greatly interested in the development of agriculture; he is an honorary magistrate for the Seohara police circle, and was awarded the title of Rai Bahadur in 1893. His estate is confined to pargana Seohara, and consists of 66 villages and shares in 23 others with a revenue of Rs. 36,196.

The Chaudhris of Sahaspur are of Afghan descent, and own Chaudhus a flourishing property, which was divided after the death of the late Chaudhri Masih-ullah Khan. The latter left two sons, of whom the elder is Chaudhri Amir Husain Khan, Khan Bahadur, who obtained his title in 1903 in recognition of his public services. He owns 12 villages and three shares in Scohara, assessed at Rs. 4,165, while his brother, Chaudhri Muhammad Sami-ullah Khan, owns six villages and five shares, with a revenue demand of Rs. 2,706.

The Raja of Kashipur is not a resident of this district. though he is numbered among the leading landholders of Bijnor. An account of the family, which goes by the name of Raotela and is descended from the Chand Rajas of Almora, will be found in the volume on the Naini Tal district.* Their possessions in Bijnor date from 1866, when Raja Sheoraj Singh was allowed to exchange the Chachait property in Bareilly for Barhapura, the ferfeited estate of the Nawab of Afzalgarh, comprising 57,000 acres of cultivated land and forest free of revenue. He died in 1886 and was succeeded by his son, Raja Hariral Singh, who died in 1898, leaving a minor son, Raja Udairaj Singh, whose property was released in 1905 from the management of the Court of Wards. The present area of the estate is 59,508 acres or 92 square miles, and though much of it is jungle land, it is of great value owing to the remission of the Government demand. The property has been increased by the purchase of the Kot Qadir estate, which was sold for debt, and now comprises 129 villages and two shares in Barhapura, and eight villages in Nagina, the assessed portion paying a revenue of Rs. 10,877. Kunwar Kirat

of Sahaspur.

Raja of Kashipur.

^{*} Gazetteen of Nama Tal, page 131.

Singh, a younger son of Raja Sheoraj Singh, holds seven villages with a revenue of Rs. 7,242 in Afzalgarh, while 11 villages paying Rs. 2417 are owned by Kunwar Bhopal Singh, the son of the late Kunwar Karan Singh, the third son of Sheoraj Singh.

Ranı of Landhaura.

Another non-resident landowner who has considerable property in this district is the Gujar Rani of Landhaura in Saharan-The history of this family will be found in the account of the Saharanpur district. The estates on this side of the Ganges were acquired partly by the Gujars of Landhaura and partly by those of Parichhatgarh in Meerut, and were amalgamated by the marriage of Khushhal Singh of Landhaura with Lal Kunwar, the only surviving member of the Meerut branch. The latter survived her husband and died in 1849, her successor being Harbans Singh, who died a year later and was followed by his son, Raghubir Singh, whose property remained under the Court of Wards until 1867. He died a year after its release, and his death was followed by that of his son, Jagat Prakash. The estate then passed into the hands of Kamal Kunwar, mother of Raghubir Singh, and Dharam Kunwar his widow. The former died in 1897, and the latter is now the sole proprietor. She owns, in addition to property in other districts, 13 villages in Bashta, six villages and one share in Daranagar, two villages in Bijnor, six shares in Chandpur, and one in Mandawar, with a total revenue demand of Rs. 8,812.

Rehar.

One of the principal landholders in the Afzalgarh pargana is Rai Lakhan Singh of Rehar, who owns 28 villages assessed at Rs. 16,698. He is the representative of the old Gorwa Rajput family, which at the time of the mutiny was headed by Rai Bhup Singh; the latter took a prominent part in the rebellion, with the result that most of his lands were confiscated, though a considerable portion was left for maintenance to his wife, Rani Pan Kunwar. She adopted Lakhan Singh, who succeeded to the property, but owing to its heavy encumbrances and the general deterioration of the pargana, it is in a far from satisfactory condition.

Other landowners. Besides those already mentioned there are several landowners possessed of considerable estates. Among the foremost of these comes the old Mufti family of Kiratpur, whose property

has been divided into six portions, and consists in all of 71 villages and shares in 16 others in the three parganas of the Najibabad tahsil, and pays a total revenue of Rs. 22,928. Najibabad is the home of several wealthy Bania families who own extensive estates in that tahsıl, the chief being represented by Sahu Har Prasad, who holds 31 villages and 12 shares with the revenue of Rs. 10,966. Among other Bania families are those of Dhampur, headed by Lala Badri Prasad, who owns six villages and six shares in pargana Dhampur assessed at Rs. 5,620; Sahu Bisheshwar Nath of Nagina who possesses ten villages and 16 shares in the Nagina tahsil; Lala Makhan Lal of the same place, and Lala Janki Prasad of Mandawar. Jat Chaudhris of Bijnor still retain a considerable estate, the chief share being held by Gulab Kunwar, who has nine villages and parts of two others in the Bijnor pargana, paying Rs. 4,686. The Rajput Chaudhris of Qasimpur Garhi in Afzalgarh hold seven villages, the Chauhan Chaudhris of Dhampur hold six villages in that pargana, and the Jat Chaudhris of Nagina own six villages and four shares assessed at Rs. 4,400. The Chaudhris of Kanth in Moradabad are Bishnois, and their property in this district comprises 28 villages and four shares in Seohara, and nine villages in Dhampur, with a revenue of Rs. 20,154. There are few Khattri zamindars of importance, the chief being Gurdayal Mal of Bijnor, who owns three villages and 19 shares in the parganas of Bijnor, Daranagar and Mandawar, and Sahu Sansar Chand of Najibabad, who own six villages in that pargana and Akbarabad. The principal Musalman estate is that of Mir Al-i-Ali of Nagina, the head of a well-known family of Saivids, who owns 30 villages and eight shares in pargana Nagina and twelve villages and one share in Barhapura with a total revenue of Rs. 14,066. Ten villages and one share in Najibabad are the property of Durra-un-Najaf Begum, the widow of the late Wazir Usman Khan of Rampur, to whom they were given by the Nawab in recognition of his services to the estate. Six villages in the same pargana are owned by Roshanaram Begum, widow of the late Ali Asghar of Rampur, but most of them are waqf and have been assigned by the owner to religious and charitable purposes. The remaining zamindars of any importance will be mentioned in the various pargana articles.

Rental systems.

The rental arrangements of Bijnor are very complicated and in several respects peculiar. The most remarkable feature is the wide prevalence of grain rents, which still prevail to a quite unusual extent. The system adopted in apportioning the crop is either that known as batur or bhuolr, wherein an actual division between landlord and tonant takes place on the threshing-floor, or else that termed kankut or amaldari, in which case the zamındar receives either a money payment determined by an appraisement of the standing crop before reaping or else in kind at harvest according to his share of the outturn as already estimated. The selection of the system depends on local custom, but roughly speaking kankut is generally as common as batai. The division is, however, not applicable to all staples. certain crops being generally exempted : such are, in the majority of villages, sugarcane, cotton, chari or juar grown for fodder, munda or crops sown immediately after sugarcane, tobacco, vegetables, melons, and in some instances pepper, maize and urd. These pay a fixed cash rent per unit of area, the rate being generally known as zabti. The amount of the landlord's share in the case of nijkari or grain-rented crops varies from place to place, depending not so much on the nature of the soil as on established custom and the power of the owner. Generally speaking, it ranges from 10 sers in the maund in the precarious alluvial and forest tracts to 21 cr 22 sers in the richer portions of the district, though ordinarily the rate is 20 sers or one-half; but in any case the share pertaining to the proprietor is subject to a deduction in the shape of the halyag or ploughman's fee. which is usually one-seventh of the half share, the latter being thus reduced to 17½ sers. On the other hand, compensation is sometimes secured by the addition of a special cess, known as zamindara, of one or two sers in the maund, while the more powerful landlords adopt a heavy ser of 96 tolas in weighing their share, and others, by a local custom called beala, take their half of a maund weighing 42 sers. But enhancements of grain rents seldom, if ever, occur: custom cannot be broken in that way, but at the same time custom is frequently invoked by the landlord to his own advantage, and his income is increased by the imposition of numerous petty dues and cesses. These are either

accidental, as when they are levied to meet the expenses of a wedding or some other ceremonial, or else constant, like the weighment fees on produce sold in the village bazar and the due demanded for each sugar-mill worked on the domain. They are not taken only from the cultivators, for even the custodian of the village temple has to pay a percentage of the offerings, while all the craftsmen make their contributions in cash or kind, nor can a new house be built nor a wife taken or given in marriage without the landlord's permission, which is only accorded on payment of the prescribed fee. To some extent, perhaps, these customs are gradually disappearing, but the process in this most conservative district is very slow, and the payment of local cesses is almost as necessary as the payment of rent.

The zabte rentals occupy a class by themselves as being zabte purely customary. They vary according to the nature of the

crop and the general capabilities of the different tracts, but in this case custom is not unalterable, and very large enhancements have been observed of late years. At the tenth settlement, between 1865 and 1872, the rate for sugarcane averaged Rs. 9-8-0 per acre, whereas thirty years later it ranged from Rs. 4-6-9 to no less than Rs 43-3-2, the mean being about Rs. 20 rate for this crop results from the practice of leaving the land fallow for a year before planting, and consequently represents two years' rent. Sometimes, and the custom is rapidly growing, a crop is sown on this pandra fallow, as it is called, in the preceding kharif; it is generally the custom for the landlord to allow the tenant the whole benefit, since it involves some risk to the sugarcane in the following year, but recently the more powerful zamindars have successfully asserted their claim to a share in the extra crop, possibly because the more important cane harvest has been shown by experience to be but little affected. The rates for cotton and munda crops average about Rs. 7 per acre, varying from Re 1-3-2 to Rs. 15-3-2 according to the locality; for chart they average some Rs. 4, ranging from Re. 0-13-7 to Rs. 11-8-0; and for vegetables, garden crops and the like the average is Rs. 12 or thereabouts. These rates, except in the case of sugarcane, have not generally increased, remaining practically the same as they were forty years ago. A common custom of former years has, however, dropped out of general vogue. This was the allowance of a deduction of 10 per cent. on the sum due on account of both cane and cotton in the event of a poor harvest and also to meet the possibility, and often the probability, of over-measurement: it is known as nabud, and is still found in several parts of the district.

Cash rents.

True cash rents, independent of the crop grown, are a comparatively recent introduction, and in most cases are merely cash payments in the lump. All round rents are seldom to be found, except in a few forest villages, and there they generally take the form of a special rate per bigha for crops that are elsewhere grain-rented and the zabti rates remain unaltered for the particular staples they affect. The substitution of money payments for rent in kind is to be seen in all its stages. The first step occurs when the landlord leases the right to collect the zabti and grain rents to one or more of the leading members of the community or to outsiders, and the lessees continue to col ect after the usual custom. The next development is an agreement with the whole body of cultivators to accept a lump sum of money in place of a share in the produce. This is the nagshi lease, which is so common in many parts of the district: the engagement is usually taken with the mugaddams or principal residents on behalf of the community, and the liability is apportioned among the tenants by themselves, usually with the aid of the patwari, though certain landlords, as for example, the Raja of Tajpur, assist in the fixation of the amount due from the several holdings. Such agreements are admittedly provisional and temporary, being made for a prescribed period, on the termination of which the landlord's right to revert to payments in kind is recognised and frequently brought into play. In some cases-a further step has been taken, the proprietor agreeing separately with each cultivator for a cash payment on each holding in lieu of his share in the outturn. These rents again have no permanence, save in the few instances where the commutation occurred at settlement or where the proprietor has allowed his right of reversion to slide. Consequently the great majority of the cash rents so recorded merely represent the cash payments made in accordance with an unexpired lease, whether given to

communities or individuals: they only refer to the manner in which the rent is to be paid, and their existence does not confer status, which depends on other circumstances than the conditions of the lease. Another point deserving notice is that as most of such payments have been evolved from calculations as to the money value of the landlord's share, whether paid in kind or at zabti rates, there is but little difference in the amounts due from different classes of tenants. On this account it was found unnecessary at the settlement to fix separate standard rates for occupancy tenants and for tenants-at-will; nor is any attention paid to the caste of the cultivator, as it seldom happens that tenants of the higher classes obtain any advantage in the matter of batai, kankut, or zab's rates. Wherever differences exist, it is generally the case that, unless some conditions of service are implied or expressed, the lower rates are those paid by the descendants of former dispossessed proprietors or of old resident tenants. Such privileges, however, date from a period long anterior to the introduction of the present law, and therefore but little correspondence is to be observed between those paying these lower rents and the statutory tenants with occupancy or exproprietary rights.

This is illustrated by an examination of the cultivating Cultivattenures of the district and by comparing their relative position tenures. in each case with that of former years. In 1865, when exproprietary rights were not sanctioned by law, 15.1 per cent. was cultivated by proprietors, either as sir or khudkasht, 47.1 per cent. was held by occupancy tenants; 35.5 per cent. by tenants-at-will; and the remaining 2.3 per cent. by owners of specific plots representing old muafi lands which had been resumed and assessed to revenue. The returns of the last settlement, 1895-1902, show 12.9 per cent. as sir or khudkasht, 42.8 per cent. cultivated by occupancy tenants, 42 2 per cent. by tenants-at-will, 5 per cent. by exproprietary tenants, and the remaining 1.6 per cent. rent free. It is unnecessary to differentiate sir and khudkasht, as the former is merely used to denote the special holding of a co-sharer, and consequently little reliance can be placed on the village records in this connection; the mahal registers, however, showed 7.27 per cent. as sir and 5.63 per cent. as khudkasht.

The decline in proprietary cultivation is mainly due to two causes, one of these being greater accuracy in the record, leading to the exclusion of the considerable area sublet, and the other the many transfers, which have taken place, especially in the case of petty landowners in whose hands the greatest proportion of proprietary cultivation is usually found. This decrease has naturally led to the increase of the exproprietary holdings, though the area thus classified represents but a small proportion of the amount transferred. There has also been a decline in the area held with rights of occupancy, but the rate varies in different parts. In some parganas there has been an actual increase, as in the Dhampur tahsil and pargana Kiratpur, owing to the consideration shown to their tenants by the Tajpur, Dhampur and Kiratpur estates; but as a rule the landowners have resisted the acquisition of occupancy rights with their utmost power. reason is, of course, that when the tenant has obtained a fixed cash rent, the landlord is barred, except at considerable trouble and expense, from gaining any share of the unearned increment accruing to the tenant from the rise in prices. This adjusts itself automatically when rents are paid in produce or according to a temporary cash valuation of such a division of the outturn. but the case is very different where the imposition of a fixed cash rent involves certain loss. The tenants, on the other hand, have learned to appreciate the value of a right which was formerly but nominal, with the result that the district has been flooded with an immense volume of litigation, in which the landlords have been generally successful. Their position, strong as it was from the first by reason of their influence and education, has been rendered more secure by the peculiar rental customs of the district, enabling the grasping zamındar to rackrent his occupancy tenants by means of temporary cash leases without recourse to the courts, and then to eject them for arrears. this attitude has not been modified is clear from the most recent statistics. In 1906 the total area included in holdings was 736,442 acres, and of this 12.59 per cent. represented proprietary cultivation, showing a further, though slight, decrease; 35.26 per cent. by occupancy tenants, the decline having been very marked in this direction; 50 94 per cent. by tenants-at-will, and

·84 per cent. by exproprietors, the small remainder being rent free.

The actual rate of cash rents varies greatly, both with the Rentstatus of the tenant and with the quality of the land. occupancy tenants ranges from Rs. 3-11-1 per acre in Bashta to Rs. 7-4-7 in Nagina, the average being about Rs. 5 in the Najibabad tahsil, Rs. 4-10-0 in Bijnor, and Rs. 6 in the rest of the district. Tenants-at-will pay from Rs. 4-11-7 per acre in pargana Najibaba'l to Rs. 9-5-1 in Nagina, the difference between their rates and those of the former class being about 15 per cent. There is practically no distinction between these rents and those paid by sub-tenants, who cultivate 31,150 acres: they are to be found in all parts of the district, but especially in the north and east.

The composition of the cultivating community corresponds Cultivatpretty closely with the general distribution of the population castes. already described in this chapter. First come the Jats, well -ahead of any other caste, and then Chauhans, these two holding nearly half the land. They are followed by Sainis, Sheikhs, Chamars, Rawas, Brahmans, Tagas and Gujars, each of whom hold a very considerable area: while Galariyas, Saiyids, Pathans, Julahas and Banjaras constitute the bulk of the remainder. The best husbandmen are Rawas, Chauhans and Saims, with Jats very close behind them. The preponderance of these excellent cultivators_sives Bijnor an immense advantage over most districts, and it is probably true that the tract is surpassed by no other portion of the United Provinces in the character and attainments of the tillers of the soil.

With regard to the condition of the people, it is only possible Condition to indulge in wide generalisations. The large landowners are with people few exceptions in prosperous circumstances, and invariably so when the management of their estates is intelligent and sympathetic. The proprietary communities in some cases are well-todo, but as a rule the increasing number of co-sharers renders the struggle for existence constantly more severe, and compels many of the members to seek an additional means of support in service of various descriptions. Their difficulties are greatly enhanced by the enormous number of resumed revenue-free plots

which are to be found in the majority of the villages. The tenants, on the other hand, are undoubtedly more prosperous than was formerly the case, having benefited in a marked degree by the growth of trade and the rise in the price of agricultural produce. The improvement in their condition has been illustrated by their greater ability to withstand the effects of famine, and though they are not so well off perhaps as their neighbours in the rich tracts of the Doab to the west, there has been a noticeable advance in their standard of comfort. As a rule, both the tenants and the agricultural labourer are well fed, obtaining two substantial meals daily, and decently clothed; their huts are neat and kept in good repair, and generally exhibit brass utensils. which constitute a sure sign of easy circumstances. The women are well clad and in most cases adorned with trinkets of silver, while perhaps the most convincing indication of comparative comfort and prosperity is the striking increase of litigation. should be added, however, that all parts of the district are not alike in this respect. The depressed tracts of the Nagina tahsil and the Ganges khadir differ greatly from the rich central and eastern uplands: the people are obviously poorer, and the squalid appearance of the villages testifies to the struggle for existence. It is impossible that the cultivators should not share in the misfortunes of the landlords, and the poverty and indebtedness of the agricultural population in the deteriorated parganas afford a remarkable contrast to the ease and affluence attained elsewhere.

CHAPTER IV.

ADMINISTRATION AND REVENUE.

Bijnor has always, since the cession of the district in 1801, formed part of the territorial division known as Rohilkhand. and is in the charge of a magistrate and collector, who is subject to the control of the Commissioner of Barelly. The sanctioned executive staff comprises a joint magistrate and two deputy collectors and magistrates with full powers, but this is frequently exceeded, a third deputy collector being generally in charge of the treasury. There are also four tahsildars, as well as the usual departmental officers, the latter including the superintendent of police, the civil surgeon and two assistants, the district surveyor, the postmaster, and the headmaster of the high school. To assist in the magisterial work there are benches of honorary magistrates at Bijnor and Nagina, and one sitting singly at Chandpur, while outside the municipalities the present honorary magistrates are Raja Sham Singh of Tajpur for the police circles of Chandpur, Bashta, Nurpur, Seohara, Dhampur and Sherkot, Chaudhri Ranjit Singh Rai Bahadur for Dhampui and Sherkot, and Chaudhri Basant Singh Rai Bahadur for Seohara. criminal appellate and civil jurisdiction the district is included in the Moradabad judgeship. There are two munsifs stationed at Nagina and Bijnor, between whom the district is divided. the former taking the whole Nagina tahsil, the Dhampur tahsil with the exception of pargana Burhpur, and the Najibabad pargana in the tahsil of the same name, while the latter's charge consists of the remaining parganas. The experiment of village munsifs was first attempted in 1894, when the parganas of Bijnor, Mandawar and Daranagar were divided into nine circles, this number being increased to 29 in 1899. The result has been but fairly satisfactory, but the system works unevenly, as is only to be expected; the difficulty lies in obtaining competent men in particular localities, and for this reason the operations

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of the Village Courts Act have not as yet been extended to the rest of the district, while at present half the circles are without incumbents, owing to the absence of qualified persons.

Formation of the district

When the country was made over to the East India Company by the Nawab Wazir of Oudh in 1801, it was at first included in the vast area known as the collectorate of Moradabad. This arrangement continued in force till 1817, when a new district was found under the name of the northern division of Moradabad, with headquarters at Nagina, the first collector being Mr. Bosanquet. He was succeeded by Mr. N. J. Halhed, who removed the headquarters to Bijnor in 1824, the ostensible reason being the unhealthiness of Nagina, though probably the great distance from the military station of Meerut had something to do with the change. It was not, however, till 1837 that the old appellation was dropped altogether and the district was regularly known as Bijnor. The subsequent changes have been but small. The principal alterations in the area were effected by the transfer of tuluqu Chandi from Garhwal to this district in 1842, and the relinquishment in 1866 of the villages lying between the foot of the hills and the submontane roal; while minor rectifications have taken place from time to time on the western border by reason of the action of the Ganges.

Subdivi-

At first the district comprised seventeen parganas, but the total has been since reduced by various changes and amalgamations. Islamabad was united with Nagina as carly as 1802. but was again separated to form the nucleus of the new pargana of Barhapura in 1842. In the same year Afzalgarh and Rehar became a single pargana, Haldaur and Jhalu were absorbed in Daranagar and Bijnor, while in 1844 pargana Barhpur was formed out of drafts from the neighbouring parganas, bringing the total up to fifteen, at which figure it now stands. A further considerable change was made in 1894, when Burhpur received a large portion of Chandpur, its western boundary having hitherto been the Ban river. This synchronised with an alteration in the arrangement of the tahsils. Formerly there had been five such subdivisions, known as Nagina, which contained the parganas of Nagina, Barhapura and Afzalgarh; Najibaba'l. including the Najibabad, Kiratpur and Akharabad parganas;

Bijnor, made up of Bijnor, Mandawar, and Daranagar; Dhampur, the headquarters of which were at Sherkot up to 1844, comprising Dhampur or Sherkot, Nihtaur and Seohara; and Chandpur, which consisted of the remaining parganas of Chandpur, Burhpur and Bashta. In 1894, the Chandpur tahsil was abolished, and its component parts were distributed between Bijnor and Dhampur. The Nagina and Najibabad tahsils have remained unaltered, while Bijnor now contains the parganas of Bijnor, Mandawar, Daranagar, Bashta, and what was left of Chandpur; and Dhampur, those of Dhampur, Seohara, Nihtaur and the enlarged Burhpur. Further details of the internal changes will be found in the various pargana articles in the second half of this volume.

The fiscal history of Bijnor properly begins with its Fiscal constitution as a separate charge, but as the present area was history. from the first inception of British rule treated more or less as a distinct subdivision, it is better to trace the history of the revenue administration to the earliest date, although the records of the initial settlements are extremely meagre. The destruction of old papers makes it impossible to obtain correct figures of the early assessments, but those which are extant will be found in the appendix, the entries being derived from the papers preserved in the office of the Board of Revenue.* There were no regular reports of the summary settlements which were effected. and the only papers in existence before the first regular settlement refer to the accepted demand for individual villages or groups of villages, the revenue of which was the amount tendered by the highest bidder. Another serious difficulty arises from the constant alterations in the pargana boundaries and the formation of new fiscal subdivisions. Adjustments have been made as far as possible, and the pargana totals as given in the appendix may be accepted as representing the demand imposed from time to time on each pargana as it now exists; but an exception must be made in the case of parganas Burhpur and Chandpur so far as the latest change in their respective area is concerned. The names of villages have altered and many fresh villages have been formed since 1844, so that it is no longer

^{*} Appendix, Table IX.

possible to determine accurately the early revenue of these tracts as at present defined, and the figures refer to the parganas as constituted prior to the redistribution of areas in 1894.

First settle-ment.

When the district was handed over to the East India Company in 1801, the only possible course was to collect during the ensuing year the amount which had hitherto been realised by the Oudh officials, and no records are in existence to show what the district was then capable of yielding. Steps were immediately taken, however, to introduce the new system of fiscal administration by the collector of Moradabad, and at the close of 1802 a summary settlement was effected for a term of three years. This was based on rough statements of village areas and former rentals prepared by the ganungo of each pargana, and estimated valuations of the produce yielded by the various soils in each village, the latter being furnished by the mirdha, a local subordinate official. From these a rental was calculated and the revenue deduced; but then the difficulty arose from the practical absence of proprietary right, and there were no recognised owners of the villages from whom engagements could be taken. Consequently the system of assessment, which so farwas conducted with some approach to modern ideas, was subjected to a pernicious modification: the right to collect rent and pay revenue was put up to auction, the demand already deduced being fixed as the upset price, and the settlement was made with the highest bidder who could furnish the requisite security. In many cases the revenue was progressive, rising by annual increments, and the maximum for the existing district was Rs. 9,14,931. It would seem that the results were fairly satisfactory in Bijnor, and at any rate they were not disastrous, as was the case in several districts, for the revenue is said to have been collected without any difficulty.

Second settlement. On the expiry of this settlement a second was made for a similar term, from 1805-06 to 1807-08 inclusive. This was merely a continuance of the arrangements already in force, and was conducted by Mr. Leycester as before. The demand at its highest point was Rs. 9,21,292, the addition to the former figure being presumably due to the resumption of lands hitherto held free of revenue.

Third settle-ment.

The next settlement was of a somewhat more scientific nature, and was made for four years, from 1808-09 to 1811-12. order to obtain more accurate information as to the capacities of the district, a survey of the crops in each village was conducted by the tahsildars, and an estimate of the probable assets was then framed from the results of this inspection and the rentals of former years. But here again the process stopped short, and the revenue was put up to auction as before. This almost necessarily resulted in an increase in the total, the demand rising to Rs. 9,70,464. The assessment was made by Mr. Lloyd, except in tahsıl Nagina, where Messrs. Christian and Law conducted the operations. The first-named officer believed that the district had reached its highest point of development, and recommended the adoption of the settlement in perpetuity, but fortunately for the public exchequer his views were not accepted. It appears. however, that the demand was then distinctly full, for the settlement failed to work as smoothly as its predecessors; heavy arrears accrued during its currency, and these had ultimately to be struck off as irrecoverable. The parganas which felt the pressure most were Najibabad, Kiratpur, Mandawar and Jhalu, while Chandpur and Bashta also suffered, though in a minor degree. The reason is not obvious, as other parganas showed much greater enhancements, and in Mandawar and Kinatpur the revenue was actually lower than at any previous assessment.

None the less, it was considered advisable to exact a still higher amount at the fourth settlement, which was effected by Mr. Batson for a term of five years, from 1812-13 to 1816-17. The demand was assessed on the same principles as before, and reached the high figure of Rs. 11,02,808. Details for the several parganas are unfortunately not available, but every part of the district seems to have come in for similar treatment and to have suffered alike. The excessive demand resulted in the ruin of many malguzars and the general impoverishment of the country, the parts which experienced the worst distress being, we are told, the Bijnor, Najibabad and Nagina tahsils and pargana Seohara: all the district, in fact, save four parganas. It proved impossible to collect more than a portion of the revenue, and eventually large balances had to be remitted altogether.

Fourth settle-ment.

Fifth settlement The fifth settlement synchronised with the formation of a separate district of Bijnor, or rather Nagina, which for seven years remained the headquarters station. The new demand, which was fixed after the same method as before, was necessarily far lower, the highest total being Rs. 10,89,138. This sum was collected with ease for the five years' currency of the settlement, and it may therefore be presumed that the district had improved rapidly, since a much lighter revenue hal proved excessive only ten years before. It seems that the assessing officer on this occasion was Mr. S. M. Boulderson, who had already gained considerable experience in Agra; but no details are forthcoming as to the methods he adopted, nor can the separate figures for the various parganas be ascertained.

Sixth settlement The next assessment was again made for five years, and lasted from 1822-23 to 1826-27 inclusive. It was made by Mr. Halhed on the principles and under the procedure of its forerunners, but was affected to some extent by Regulation VII of 1822. No attempt was made to form the record of rights prescribed by this enactment, but it was laid down that the assessments of the fifth settlement should continue in all estates in which engagements had been taken from proprietors, whose zamindari status was thus for the first time recognised by law. The increase must therefore have been confined to those estates which had previously been farmed, and these were apparently numerous, for the total demand was raised to Rs. 11,33,351; and this amount was paid without difficulty, except perhaps in the parganas of Kiratpur and Nagina.

Seventh settlement. Before the expiry of the sixth settlement, a partial endeavour was made to conduct the village survey required under Regulation VII, but the cumbrous nature of the machinery provided for the purpose soon proved that the experiment was impracticable, and after a few villages had been dealt with at an immense loss of time and trouble, the task was abandoned. The new settlement, which was to run for five years, from 1827-28 to 1831-32, was effected by Mr. Grote, though Mr. Augustine assessed part of pargana Nagina and Mr. Halhed the whole of Chandpur. Where the system of Regulation VII had been introduced, the settlement was made in accordance with the provisions of that

law, but the bulk of the district was treated in the same summary manner as hitherto. The revenue amounted to Rs. 11,34,436, so that it appears, in the absence of detailed statistics, that the expiring demand was left practically untouched. Nagina again seems to have experienced some difficulty in payment, but elsewhere no balances were reported at any time.

The eighth settlement differed in no way from those that had gone before, so far as the principles of assessment were concerned, and no further attention was paid to Regulation VII. operations were entrusted to Mr E. C. Ravenshaw, who took engagements for periods ranging from seven to ten years in different parganas, but commencing in all cases from 1832-33. The demand was Rs. 11,35,286, or very much the same as that which had just expired, but arrears accumulated in Nagina, Kiratpur and Bashta, which possibly had all along been over-assessed, though the true reason more probably lay in the harassing unrest and uncertainty caused by revisions at so frequent intervals.

This condition of affairs was accentuated when the introduction Nuth of Regulation IX of 1833 necessitated further operations. amended and called attention to that of 1822, but the obvious benefits which it was intended to convey, and which ultimately resulted from the measure, were largely discounted at first by the confusion that ensued. The new assessment came into force at dates varying, in the different parganas, from 1834-35 to 1839-40, so that the eighth settlement lasted from two to seven years only, and in the greater part of the district for harely four years. This ninth revision was the first regular settlement, and differed in a marked degree from any that had hitherto been made. was conducted on a fairly thorough system, and was based on a scientific record-of-rights, while perhaps the most important innovations were the abandonment of farming and the fixation of the revenue for a term of twenty years. The initial task was that of carrying out a professional survey, which was commenced in 1834 and completed in 1839. At the same time accurate village papers were prepared, and from these were obtained a precise record of the rights existing in the soil. The latter having been determined, the villages in each pargana were classified by circles according to their character and capabilities, and standard rent

and revenue rates were educed as a preliminary to assessment. Unfortunately the work was carried out by a number of officers, so that considerable unevenness resulted. The pargana of Bijnor and the Najibabad tahsil were assessed by Mr. H. Lushington; Daranagar and Dhampur by that officer in combination with Mr. R. Ker Dick; Mandawar by Messrs. Lushington and A. Trench; the Nagina tahsil by Mr. C. Allen, and the remaining five parganas by Mr. Dick alone. Beyond the amount of its demand and a few minor details, little is known of the settlement and the manner in which the rates and results were obtained, as almost all the records were destroyed in 1857, and no printed report of the proceedings was ever published. The revenue amounted at the outset to Rs. 11,48,488, giving an average incidence of Rs. 2-7-0 per acre of cultivation, the rate ranging from Rs. 3-8-4 in pargana Kiratpur to Re. 1-8-0 in Bashta. Large additions were subsequently made by the resumption of revenue-free lands and by the assessment of alluvial accretions, though the latter were more than compensated by losses due to diluvion; the total demand at the expiry of the settlement being Rs. 11,83,585. The original term of twenty years was extended by Act VIII of 1846; and the end of June 1866 was fixed as the date of termination throughout the district.

Its results.

Judged by the initial revenue incidence the assessment of the ninth settlement was distinctly heavy, but conflicting views on this subject rendered the question highly controversial and occasioned much acrimonious correspondence in years to come. The rate was undoubtedly much higher than that of Moradabad, Bareilly or Budaun; and though the settlement worked well throughout its course, the explanation probably is that the people had always been accustomed to a high revenue demand, and that a high standard of rent had consequently long prevailed. actual increase on the expiring revenue was not great, and it is practically certain that in most cases prospective assets were taken into account; and although the chief fault of the assessment lav in its unevenness, it was admitted to be a great improvement in this respect on its predecessors, the improvement consisting in the greater equality with which the revenue was imposed on individual estates. The blame for the state of affairs existing when

this settlement was introduced cannot of course be ascribed to the settlement. To quote Mr. R. M. Bird, the chief revenue authority of his day :- "The state of the district of Bijnor, at the time the settlement was made, presented insuperable difficulties to the assessment of an equal demand. The district had been heavily assessed with reference to the state of its cultivation, and cruelly treated. The modes of extracting the revenue then employed are now happily almost forgotten. Forced transfers of property to unwilling purchasers and mortgagees; forced loans extorted from unwilling bankers; forced labour required for the cultivation of mauzas which, from abandonment, had fallen into the management of the public officers, were among the practices resorted to. Of course, in such a state of things, the only course to be adopted was to give such relief as the circumstances of each village required, and fix for the coming term such a demand as could be regularly levied without employing means of duress unauthorized by law or inflicting distress. The object was effected in a satisfactory manner, the district has recovered from its sufferings, and the revenue is regularly and easily collected, but the object of equality in assessment has not been obtained." If this account is accurate, the settlement could afford to be called stiff: it should be remembered too that the Government share was then considered to be two-thirds of the assets, and it is of great importance to bear in mind that during the term of the ninth settlement prices almost doubled, the effect of this on a district in which grain rents prevailed to an altogether unusual degree. being almost incalculable.

The burden was further lightened by an increase in cultivation to the extent of 25 per cent, and it was therefore perhaps reasonable to expect that the next settlement would result in a substantial enhancement. Such, however, was not the case, and it was this fact that caused so much controversy between the various officers who took part in the revision. Operations began in November 1863 with the survey; while the actual measurements, together with the classification of soils and preparation of village maps and records, were commenced in the following May. The survey was not completed till 1866, though that of the forest tracts lasted till 1872. These undertakings were quite

Tenth settlement.

independent of the professional revenue survey, which was conducted by Major Vanrenen between 1868 and 1870. With the aid of these returns and personal inspection, the assessing officers proceeded to form circles based on natural divisions of soils and situation. The next task was that of educing standard rates, and this was complicated by the prevalence of rents in kind, with high customary rates in cash for special crops, and the small proportion of ordinary cash rents. In determining the standard rates somewhat different methods were adopted by the different officers. Mr. G. Palmer was at first in charge, and assessed all tahsil Bijnor and a considerable part of Nagina; he was assisted by Mr. C. W. Carpenter, who assessed nearly all the Najibabad and Dhampur tabsils between May 1864 and April 1868; and then by Mr. A. M. Markham, who completed the work, assuming independent charge in August 1868 and submitting the final report in 1874. Mr. Palmer depended largely on the cash leases of villages to farmers, which are very common even where the rents are paid in kind; from these he obtained an average money rate per acre, and then framed soil rates in each circle from estimates of the produce of each class of soil, converting the landlord's share into money. The result of assessing on these principles was a reduction of 7 per cent. in the old Bijner tahsıl, and it was therefore argued by his successor that the accepted assets were inadequate. They may have been so at the time, but no general rise in rents occurred till the assessments were concluded, so that what was but a fair moderate demand in 1866 became unexpectedly light in the course of ten years. A further difficulty was caused by the uncertainty of prices, the decided upward tendency of which was not yet manifest, and also by the inaccuracy of the patwaris' returns, which rendered a revision of assessment to some extent empirical and arbitrary. Mr. Carpenter followed a similar method, framing his rates partly on the cash leases of the expiring settlement, and partly from estimates of produce, in which the zamındar's share was commuted into cash. This again gave a decrease of 9.7 per cent. in Najibabad and 7.2 per cent. in Dhampur, which was adversely criticised in the same manner; but it should be borne in mind that both officers relied rather on their own inspections than on

the more or less presumptive evidence to be obtained from returns, and both were convinced as to the necessity of a light assessment, while it was obviously unreasonable to attribute blame to them for not allowing adequately for unlooked-for developments in the near future. Mr. Markham differed from the others in his procedure, though he first ascertained the same average cash rate from leases and other sources, and also like them prepared crop and soil rates from the estimated outturn. He then undertook to correct the recorded assets by adding $12\frac{1}{2}$ per cent. to the returns as given by the patwars on account of short entries, and increasing the recorded leases by $7\frac{1}{2}$ per cent. to cover dues and miscellaneous receipts. Had this been done throughout the district, a general enhancement would, no doubt, have resulted; but though it was in some measure supported by probable reasoning, the assumption was on the face of it arbitrary and unverifiable. Still it appears that his assessments were based principally on the crop rates, obtained partly from zabli cash rents and partly from estimates of produce; the value of the latter being calculated by taking the zamindar's share at 174 and 163 sers per maund respectively in the uplands and lowlands, and converting it into cash at the average market price for the ten years ending in 1868. In all the parganas assessed by Mr. Markham a substantial enhancement was taken, the average for the Chandpur tahsil, as then constituted, being 19.5 per cent. on the expiring demand, and that of tahsil Nagina 11.2 per cent. The net result of the assessment was a revenue of Rs. 11,83,029, or less by Rs. 556 than that of the former settlement at its close. It was almost unavoidable under the circumstances that the incidence should be uneven: it ranged from Rs. 2-14-0 in Nagina to only Re. 1-4-7 per acre of cultivation in Bashta, the average for the whole district being Re. 1-15-2. This was a higher figure than that obtained in any other part of Rohilkhand at the same period, so that on this score the assessment can hardly be considered inadequate. The cost of the settlement was unusually heavy, amounting to Rs. 5,38,300 or Rs. 283 per square mile; this included the survey, and the excessive expenditure was due to the protracted duration of the work, resulting from the constant changes of officers and the

difficulty experienced in correcting the record. The settlement was sanctioned for a period of thirty years from the introduction of the new demand in each pargana: that is, from 1867 in the Bijnor and Najibabad tahsıls; 1868 in Dhampur and Nagina, excepting pargana Nagina; and 1872 or 1873 for the rest of the district, including the Chandpur tahsil and the Nagina pargana.

Working of the settle-ment.

It was only to be expected that the demand would be collected without difficulty, and such proved to be the case. Large balances accrued on account of the famine in 1878, when Rs. 35,803 were remitted, but apart from this the entire amount due was realised. The more severe forms of coercive processes had seldom to be employed: in a single case was sale of the defaulter's immoveable property necessary, while in six instances the settlement was annulled. Statistics of transfers show that about one-third of the revenue-paying area changed hands, but so many of these transactions were purely nominal that the returns afford no true indication of the condition of things. Sales by order of court exhibited a constant tendency to decline throughout the period, and on the other hand the value of landed property rose to a marked extent. When the settlement expired, the demand had decreased by Rs. 1,352, mainly as the result of appropriation of land by Government and of diluvion, though the latter was largely compensated by accretions in other portions of the Ganges, course.

Eleventh settle-ment.

Owing to the great difference between the dates on which the tenth settlement expired in the various parganas, the revisional operations could not be conducted at the same time. Consequently the four parganas of Chandpur, Burhpur, Bashta and Nagina, together with certain forest villages of Najibabad, Barhapura and Afzalgarh were excluded from the settlement as originally undertaken, and dealt with at a later period by a different officer. It was anticipated that a large enhancement of revenue would be the result of the revision, for though the cultivated area generally had not increased to any marked extent, there had been a great improvement in the quality of the crops grown, a wide extension of the double-cropped area, and an extraordinary rise in the value of agricultural produce, resulting

from higher prices and the development of the district since the opening of the railway. This forecast was fully justified, as the event will show. The district was declared under settlement in the cold weather of 1893, and the first year was occupied in the preparation of village maps and records under Mr. W. Fraser, the collector. No fresh survey was undertaken, except in the forest villages, of which the existing maps were found to be useless; elsewhere the old settlement maps were merely brought up to date, and these corrected maps proved eminently serviceable. At the same time the records were compiled and attested, and when Mr. F. J. Pert arrived in November 1894 and took over charge as settlement officer, he was enabled to start the work of assessment at once. Circles were formed, as before, on topographical considerations, and then standard rent-rates were selected. This task was one of great difficulty owing to the prevalence of rents in kind, the absence of any classified soil rates, and the unreliable nature of the entires in the patwaris' records. Eventually it was decided to use merely the verified rentals of the cash-paying area, with the assistance afforded by cash leases paid in grain-iented villages during the past twelve years. But these merely gave all-round rates, and differential soil rates had to be evolved by taking the average rentals of holdings similar in quality, aided in a large measure by personal experience. By applying these rates to the area under assessment, which was distinctly full and included a large amount of current fallow, and by making the necessary additions on account of sayar income and deductions for sir land, the assessable assets were obtained. The proportion taken as revenue amounted to 46.41 per cent., the lowness of the figure being due partly to the impossibility of imposing a full demand in many cases owing to the enormous enhancement that would have resulted; partly to the necessity for caution in villages held mainly or wholly on grain rents; and partly to the desirability of moderation in those communities in which the number of proprietors was excessive. The revenue represented an increase of 30 per cent. on the expiring demand, ranging from 18.5 per cent. in Afzalgarh to over 38 per cent. in Daranagar and Nihtaur. In order to mitigate the results of a suddenly enhanced demand, wherever the enhancement exceeded 25 cent., progressive assessments were adopted, the final revenue being payable in the eleventh year. The settlement came into force at different dates in the different parganas, but for the sake of convenience it was sanctioned for a period terminating in 1927 for the Bijnor and Najibabad tahsils and a year later for the rest of the district. The final demand for each pargana will be found in the appendix.*

Further proceeds ings.

The remainder of the district was assessed by Mr. A. T. Holme, who was appointed settlement officer in the cold weather of 1901. His work was completed in 1903, and the settlement of the four parganas was sanctioned for a period ending in 1929, that of the forest tracts being made conterminous with the period fixed for the parganas in which they lie. The method of assessment was practically identical with that followed by Mr. Pert, the only difference being in the treatment of grain-rented lands. Mr. Pertheld that as in practice villages changed from grain to cash and from cash to grain, the rates were therefore interchangeable; but it was afterwards proved that grain rents generally prevail in inferior lands, and consequently the ordinary circle rates were reduced by 25 per cent. for those villages in which rents are customarily paid in kind, and a special investigation into the previous history of the village was made where the systems were found to have alternated. This method resulted in proportionately reduced assets, and at the same time a slightly less full area was taken for the purpose of assessment. The proportion of the revenue to the net assets was 47.76 per cent., this higher figure being necessitated by the more lenient conditions; the average enhancement on the expiring revenue was 11.15 per cent., but it must be remembered that these were the parganas formerly assessed by Mr. Markham, who was deliberately more exacting than the other officers engaged in the tenth settlement. The revenue incidence per cultivated acre was Rs. 224, as compared with Rs. 247 in the rest of the district, the difference being doubtless due to the inferior nature of the tract concerned, excepting Nagina and the canal-irrigated portion of Burhpur. So great indeed was the deterioration in pargana Bashta, that a number of villages were settled for five years only; a normal cultivated area and a maximum revenue

were determined, as well as rates for use at intermediate revisions, so that at the end of five years either the maximum could be fixed for the remainder of the full term, or a second revision could be made in case the cultivation had not reached the prescribed standard.

The net result of the eleventh settlement was a revenue of Rs. 14,65,341, representing an enhancement of nearly 24 per cent. on the preceding assessment. The increment was not large. if it be remembered that for nearly sixty years the demand had remained almost stationary, while the general development during that period had been immense. This total included Rs. 38,285 for short-term villages, and also the revenue of the alluvial mahals. Of the latter some were assessed for the full term at Rs. 10,460, irrespective of any changes that might occur in the future; they are the property of substantial zum indurs, such as the Raja of Tajpur and Chaudhri Ranjit Singh of Sherkot, who did not wish to be troubled with the usual quinquennial revisions. but preferred to incur the risk of loss with the possibility of gain. and they lie in the basins of the Khoh and Ramganga rivers. Other alluvial mahals, paying Rs. 11,686, were assessed by the settlement officer, merely because the date of revision happened to coincide with the inspection of the pargana in which they lie: but the great majority were assessed nominally at Rs. 44.274. as a temporary measure until such time as they should come up on the regular roster.

The alluvial mahals were thus settled simultaneously with Alluvial the rest of the district only in those cases where the year of revision under the ordinary rules coincided with the year of inspection for settlement purposes. There was a large number of these mahals on the register, but in many cases the assessments had never been revised, or else the rules had been but imperfectly followed. For future guidance rates were framed for all the circles, a new register was prepared, and a record-of-rights drawn up for each estate. The total number of these mahuls is 357. of which 151 are in the Bijnor tahsil, chiefly in the Mandawar and Bijnor parganas, all of them being affected by the Ganges: 23 are in Najibahad; 95 in Nagma and 88 in Dhampur, where the influence of the Ramganga makes itself chiefly felt. The

The reve-

mahals.

total revenue at the preceding settlement was Rs. 46,757, and this has been constantly changed, especially in Bijnor, Mandawar and Dhampur, the other parganas as a rule coming up for revision only after the usual term of five years. Further details will be found in the several articles. In 1906-07 the total revenue of the mahals, taking the last assessment in each case, was Rs. 44,079, a large increase having occurred in Bijnor, Bashta, Nagina and Afzalgarh, while other parganas, and notably Mandawar and Dhampur, showed a marked decline.

Working of the settle-ment.

The new assessment worked smoothly from the first, except in one portion of the district. This comprised pargana Afzalgarh and most of Barhapura, which were in a depressed state at the time of settlement: this was thought to be of a temporary nature, and the revenue was based on the average figures for previous years, but the serious nature of the deterioration was hardly realised, and it was not till 1902 that it became evident that relief was necessary. The assessment had been made on an area of 49,887 acres, which was less than the average for the preceding twelve years, but 9,500 acres in excess of the amount recorded in the year of verification. Instead of recovery there had been a further decline, and but for the wealth of the proprietors, chief among whom was the Raja of Tajpur, the settlement would have broken down. Mr. Holme was accordingly deputed to examine all Afzalgarh and the depressed portion of Barhapura, and in the interim revenue was suspended to the amount of Rs. 6,055. The investigation showed that both cultivation and population had declined, that jungle had spread, and that the crops were more than ever exposed to the ravages of wild beasts. A substantial reduction of the revenue was accordingly sanctioned. In Afzalgarh 90 mahals, including eight alluvial mahals, which had been settled unconditionally for the full term, came in for treatment. Their initial revenue stood at Rs. 43,855 and the final demand at Rs. 45,480. The effect of the revision was to reduce the total to Rs. 31,470 in the non-alluvial mahals for ten years, from 1902-03, and to Rs. 2,730 in the alluvial area, conditional on the relinquishment by the proprietors of the long-term settlement; the mahals being brought on to the alluvial register and made subject to the same periodical revision as the other alluvial lands in the pargana. In Barhapura the state of affairs was less serious, while the conditions were largely modified by the fact that most of the pargana is held revenuefree by the Raja of Kashipur. All that was done was to reduce the demand from Rs. 1,565 to Rs. 1,000 in 14 mahals for period of five years only.

Save for these exceptional circumstances demanding exceptional measures, the settlement may be said to have worked admirably from the first. The only difficulty experienced in collecting the revenue is that which must necessarily occur where shares are minutely subdivided. The deteriorated villages have made a marked recovery since the revision, and a great deal of new cultivation is to be seen in the jungle and forest areas. Rents have risen everywhere to some extent, though the increase in the total rental, amounting in 1906 to about 13 per cent. above the accepted assets of the settlement, is largely due to the extension of tillage. The average rental demand for the past five years has been Rs. 32,73,156, and the collections for the same period have averaged Rs. 29,17,938. The revenue at present payable amounts to 48.9 per cent. of the latter, though the incidence is very much lower if the gross demand be taken, as so large an area is revenue-free. The full rental would, if collected, make the pressure of the revenue extremely light.

In addition to the regular land revenue, the ordinary cesses Cesses. are collected. These now comprise the owners' and occupiers' rates, of which some mention has already been made in connection with the canals, and the ten per cent. local rate, which dates from 1871, when the various old dues, such as the school, road and district post cesses, were amalgamated and received the sanction of law. The famine cess of two per cent., which originated in 1879, was abolished in 1905, and further relief was afforded in 1906 by the withdrawal of the four per cent. patwars rate, which had been in existence since 1889. The total amount realised under the head of cesses, but excluding the canal rates, in each pargana and the whole district in 1906 will be found in the appendix.*

Police administration originated, though in a modest and Police? tentative fashion, with Regulation XXVII of 1803, whereby the

tahsildars, who had at first no fixed salaries, but received a percentage of the gross revenue collections, were bound to maintain an efficient watch and ward within the limits of their jurisdiction, excepting the large towns and important markets in which the provision of police appertained to Government. This system not unnaturally broke down. The tahsildars failed to employ an adequate force, and the men in their pay were insufficiently controlled. Consequently in 1807 the power of appointing police officers was withdrawn from the tahsildars and vested in the magistrate, who thenceforward assumed the entire control. It was not till the enactment of the present Police Act in 1861 that this arrangement was abolished, and the organization and management of the police was entrusted to a superintendent, under the general supervision of the district magistrate. At the same time the regular police came into existence, many new stations were established, and the area was divided into clearly defined circles. The village police, however, still remained to be brought into line. Hitherto they had been paid by the landowners, their remuneration generally taking the form of a jagur or rent-free grant of land, and this system was no more successful in Bijnor than elsewhere: the men were inadequately paid, almost invariably inefficient and ignorant of their duties, and considered themselves rather the servants of the zamindar than of Government. The general substitution of a cash wage was effected about 1873, and since that time the village police have been paid in cash at the regular police-stations to which they are attached. The composition and distribution of the police force in 1906 is shown in the appendix.* The whole is under the district superintendent, subordinate to whom are the European reserve inspector, the prosecuting or court inspector, and two visiting inspectors. Under the reserve inspector are the armed police, comprising one sub-inspector, 15 head-constables. and 78 men, and the civil reserve of 14 head constables and 61 men, located in the police lines at Bijnor and detached for duty as occasion requires. The force distributed among the various stations comprises 25 sub-inspectors, 20 head-constables, and 181 men. In addition, there are 126 men of all grades for the watch and ward of the municipalities, and 84 men for the Act XX

^{*} Appendix, Table XVII.

towns. The rural chaukidars number 1,776, and the road police 50, the latter patrolling the routes from Moradabad to Bijnor and Hardwar, and from Bijnor to Nagina.

The allocation of the regular police as effected after the Police mutiny has remained practically unchanged up to the present time. The original arrangement comprised ten stations of the first class, at Bijnor, Nagina, Najibabad, Dhampur, Nihtaur. Chandpur, Kıratpur, Seohara, Afzalgarh and Amhera; one of the second class, at Barhapura; and nine of the third class, at Amsot, Ganj or Daranagar, Bashta, Mandawar, Nagal, Nurpur. Rehar, Sherkot and Kauria. Besides these, there were subordinate outposts at Chandi, Kot Qadir, Sahaspur and Jalalpur-ghat. These last have all been abolished, while other changes include the substitution of Shampur for Amsot, the reduction of Kauria to an outpost of Najibabad, and the conversion of Amhera and Nurpur to the second class. This gives a total of 19 stations, with an average area of 98.3 square miles to each circle and a population of 41,050 persons.* These circles were well arranged. in many cases coinciding with the pargana boundaries, while only in the case of Chandpur did the jurisdiction of any thana extend into two tahsils; so that the administrative difficulties, which in so many districts have been caused by an arbitrary determination of police circles, are here singularly absent. Under the new scheme of 1906 several modifications will be effected. It is proposed to reduce the number of stations by four, by amalgamating Ganj with Bijnor, Rehar with Afzalgarh, and Shampur with Nagal, and by partitioning Bashta between Chandpur and Amhera, the latter station to be moved, when opportunity occurs, to Haldaur. Shampur is to be retained as an outpost, as some force of police is required at intervals along the pilgrim route, and the existing outpost at Kauria is also to be retained. There will thus be 15 stations, with an average area of 124.5 square miles and 51,997 inhabitants to each circle. The Bijnor tahsil will be divided between Bijnor, Mandawar, Amhera and Chandpur; tahsil Najibabad between Najibabad, Kiratpur and Nagal, with outposts at Kauria and Shampur; tahsil Nagina between Nagina, Barhapura and Afzalgarh; and tahsil Dhampur

between the Dhampur, Nurpur, Nihtaur, Seehara and Sherkot police circles. Further changes refer to a slight increase in the force entertained, and the substitution of regular police for the municipal *chaukidars*, to be carried out as soon as the requisite funds are available.

Crime.

The criminal work of the district is on the whole fairly light, though every year brings to light a considerable number of serious offences. Fluctuations must necessarily occur, especially in the case of offences against the person; murder and grievous hurt are usually the result of jealousy on the part of an injured husband or relative, and while such crimes are more or less common, they are not always easy of detection. The returns, given in tables VII and VIII of the Appendix, also show that sexual offences are not infrequent; but complaints of this nature are often false, and are in most instances made in order to conceal their guilt by the women concerned. The commonest crimes, as usual, are those against property, and these are the work, generally speaking, of two distinct classes, the professional criminals and the wandering tribes. The latter comprise Haburas. Bhantus and similar castes, as well as resident Nats and sweepers, and are responsible for at least two-thirds of the offences. Their habits distinguish them readily from the professional class. In dacoities they seldom or never attack houses, but confine their operations to the forest tracts, where they rob pilgrims and wayfarers on the jungle roads. In burglaries they hardly ever employ the usual stock-in-trade of the professional, but obtain ingress by scaling walls, removing screens or entering through open doors. Their plunder consists mainly in jewels snatched from sleeping women or children, clothes, shoes and domestic utensils. Such persons are rarely arrested, and offences of this nature can only be repressed by wholesale prosecutions under the preventive sections of the Code of Criminal Procedure. result of numerous police raids has been that the Bhantus and Haburas have taken to concealing themselves while their women roam from village to village. It is remarkable how closely the advent of their camps synchronises with an outbreak of crime in the vicinity, and the only effective check under such circumstances is to cut off the shelter and food supplies of the concealed

males by prosecuting the women for bad livelihood. Their burglaries are not confined to any portion of the district, but the heaviest returns come from the Najibabad and Kiratpur circles, which are overrun by Nats and others of a like stamp. Dacoities are only common where the jungle affords a place of refuge; but the professional dacoits generally resort to the country south and east of the railway. The latter are drawn from all castes, though Jats as a rule predominate: they are usually local bad characters, and their term is always limited, since although they may continue their depredations for months at a time without leaving a clue behind them, one of the gang is certain in the end to turn informer. In most instances they attack the houses of the well-to-do, and they often provide themselves with fire-arms. The professional burglar patronises the large towns. He most frequently resorts to boring, but lock-breaking is not uncommon, though the latter method is generally ascribed to chaukidars or their confederates. The professional plays for a higher stake than the wanderer, but while success brings in a rich return, he fails in twothirds of his ventures, whereas the wanderers appear to succeed in getting away with their less valuable booty in eighty or ninety per cent. of the cases reported. The latter too are far more successful in evading arrest, and for every vagrant criminal detected, at least ten of the professional type are brought to book. As already mentioned, there is but one effective way of dealing with the wandering tribes. and this is not always easy to carry out: the professional, on the other hand, should be a marked man, if a close surveillance be kept of bad characters and time-expired convicts, together with an intelligent use of information sheets recording their movements. Among other crimes mention may be made of riots, which arise from quarrels about the possession of land and are fairly frequent, and cattle theft. The latter is done in two ways: either the bullocks stolen from villages are yoked to a tanga and driven off, an old woman being usually seated in the cart to allay suspicion; or else the herds grazing in the jungles are raided by Banjaras and by Gujars from other districts, several heads of cattle being carried off at a time. Numerous losses of single animals in the jungle pastures are not even reported, the owners being satisfied that the cattle have fallen victims to wild animals.

Infanti-

Till quite recently Bijnor was considered one of the worst districts of the provinces in the matter of infanticide, but the crime is now regarded as extinct. The principal offenders were the Jats and the Chauhans of the Chaulhri subdivision, the former being especially notorious. No regular preventive measures seem, however, to have been adopted till 1876, when two clans of Jats were proclaimed as suspected of killing their infant daughters, the population thus affected numbering some 17,800 souls and inhabiting 147 villages, mainly in the Bijnor and Najibabad tahsils. The successive of the punitive measures was at once established, so that in a short time it became possible to reduce the list of guilty villages to comparatively small proportions. Twenty years later there were but forty left on the list, of which 31 were in tahsil Bijnor and the remainder in Najibabad, the inhabitants being Jats in 28 instances and Chaudhris in the rest. In 1897 it was proposed to exempt the entire number, but eventually eighteen were reserved for further surveillance. The number was further reduced by five in the following year, and in 1899 three more were released, leaving six in Bijnor and four in Najibabad, the conditions of which were still unsatisfactory. Three of these were exempted in 1904. and a year later the operations of the Act were entirely withdrawn from the district. The measure had done its work, and it only remains to be seen whether the crime, now openly deprecated by the Jats, will show any signs of recrudescence in the future. The difficulty lies rather in the prevention of neglect than of actual and deliberate murder.

Jail.

The district jail is located at Bijnor, and is a building of the third class, constructed on the usual pattern. It dates from 1852 and has undergone but few modifications: there is accommodation for 257 prisoners, exclusive of those detained in the civil prison and the magistrate's lock-up, both of which form integral portions of the jail, while the hospital can hold 16 others. The maximum is, however, but rarely attained, and when this is the case the jail is very crowded, the average superficial area per prisoner being but six square yards, or less than in any other institution of the kind in the United Provinces. The superintendence is vested, as usual, in the civil surgeon.

The ordinary manufactures are conducted in the jail by convicts, the most important being the weaving of cotton cloths, durries and the like, and of different varieties of ropes, twine, and matting from aloe fibre, barb and other jungle grasses.

Excise.

In the early days of British rule excise administration was of a very simple description, the whole district being farmed to contractors, whose right to manufacture and sell country liquor was obtained by an auction sale of each pargana. This system continued in force till 1862, when the right of private distillation was abolished and Government distilleries established; the shops were sold by auction, though in 1869 a fixed rate was determined in each case by the collector in place of competition. There was only one distillery in this district, at Bijnor, and this continued to serve the entire area till 1882, when the outlying parganas of Najibabad, Afzalgarh and Barhapura, as well as the portion of Dhampur beyond the Khoh, were brought under the outstill system. There had previously been a reversion to farming. beginning with pargana Nagina in 1879, while two years later the whole district was thus treated. With the introduction of outstills, the rest of the tract was managed under the ordinary distillery system, and the only subsequent change was effected in 1897. when the trans-Khoh portion of Dhampur was included in the distillery area. In 1904 the Bijnor distillery was closed, and liquor was thereafter imported by the licensees from Saharanpur. Dehra Dun, Meerut and Moradabad. The spirit is almost wholly obtained from the distillation of shira, and is mainly consumed by the labouring and industrial classes, though the advent of plague seems to have induced a tendency among the higher grades of the population to indulge in spirits, owing to the belief that it acts as a preventive. The shops are sold annually by auction, the purchasers being usually Kalwars. There are now 73 retail and 15 wholesale shops in the distillery area, and 13 stills and shops combined in the outstill tract. In addition, branch shops are permitted to be opened in the case of certain markets and bazars. The price of liquor varies according to its strength, from ten annas to a rupee per quart bottle; that made at the outstills is usually weaker, and is coloured in order to prevent smuggling. The consumption and income depend to a

large extent on the nature of the season and the outturn of the harvest, but both exhibit a general tendency to rise. From 1877 to 1886 the total receipts, whether from still-head duty, licensefees or other sources, averaged Rs. 19,800, though this would have been much higher but for the famine at the beginning of the period, which reduced the income to an unprecedentedly low figure. For the next ten years the annual average was Rs. 35.840, the revenue from the outstill area going up at a remarkable rate till about 1892, when the agricultural depression in the Nagina tabsil first set in, and a striking drop was recorded, though in the rest of the district it remained fairly stationary. From 1897 to 1906 the average rose to Rs. 39,600, the highest figure being no less than Rs. 57,616 in the last year. The consumption for the same period averaged 11,850 gallons, though this only refers to the distillery area; a safer index is afforded by the incidence of revenue per 10,000 of the population, which averaged Rs. 474, a very low figure; even in the last year, when it reached Rs. 755, it was only half the general average for the provinces, and very much less than in any of the adjoining districts.* It is now proposed to introduce the contract system into Bijnor with effect from April 1909. According to this scheme the district will be grouped with Saharanpur and Muzaffarnagar, the right of manufacture being leased to a single contractor for three years. Bonded warehouses will be maintained at Bijnor, Najibabad and Dhampur.

Tari and Sendhr. The receipts from foreign liquors, including Rosa rum, are very small. Four licenses were granted in 1903, and the number was increased by one in the next year, exclusive of that for the Najibabad station refreshment-room. The income in 1906 was Rs. 514. The fermented liquors known as tari and sendhi have no place in the excise administration of this district. Toddy trees do not exist, and though the khajur palm is to be found in several places, there is no demand for sendhi. A license for Rs. 50 was granted in 1901 to a contractor, but the experiment proved a failure and was not repeated.

Hemp drugs, The consumption of hemp drugs, on the other hand, is fairly popular with many classes of the people, although the practice

seems to have decreased markedly of late years. The decline is perhaps not unconnected with the enhancement of the price. resulting from a higher duty, and possibly with the smuggling that is suspected from the hills of Garhwal, where a lower rate is in force; but the amount consumed has fallen to such a degree that it seems certain that the use of drugs is less widely spread than was formerly the case. They take the form of charas and bhang, that known as ganja never being imported. The right of vend is leased to a single contractor, under present arrangements, for a period of three years. This system has always been in force, and has been found to work satisfactorily. The contractor is also permitted to collect the wild hemp which grows almost everywhere in the district, and is especially abundant in the forest tracts of the north. The income from 1877 to 1886 averaged Rs. 5,192 annually, and for the following decade Rs. 9,450; while from 1897 to 1906 the average was no less than Rs. 13,280, the last triennial contract being for Rs. 58,000. This has not, however, been accompanied by an increased consumption, but rather the reverse. From 1891 to 1900 the amount of charas sold retail averaged 3,622 sers, and of bhana 2,821 sers annually, while for the five years ending in 1906 the corresponding figures were but 1,035 and 1,594 sers.* The incidence of receipts per 10,000 of the population was Rs. 302 in the last year, and this is well below the provincial average, in spite of the increased revenue.

The cultivation of poppy is prohibited in this district, but Opium. the consumption of opium is comparatively large, owing no doubt to the strong Musalman element in the population. The revenue, whether from license fees or the sale of Government opium, averaged Rs. 9,057 from 1877 to 1886, the amount issued being 953 sers annually. For the next ten years the figures rose to Rs. 12,100 and 1,124 sers respectively; and from 1897 to 1906 the averages were Rs. 13,122 and 912 sers, so that an increased income has been accompanied by a smaller consumption. This is due mainly to changes in administration. Prior to 1873 each pargana was put up to auction, and the highest bidder had a monopoly of the sale in that particular tract; but

afterwards licenses were given for each shop, and a much larger revenue was derived from this system. The only subsequent change of importance was the abolition of official vend in 1900, resulting in a large enhancement in the license fees, which rose from Rs. 1,946 in 1897 to Rs. 7,959 in 1906, or roughly four times as much. The number of shops has also increased, and now stands at thirty. The incidence of the revenue per 10,000 inhabitants in the same period has advanced from Rs. 124 to Rs. 209, the latter figure being fairly high, though it is largely exceeded in Mora-labad and all the districts of the Mecrut division.

Registra-

Prior to the introduction of British rule, the duty of registering documents was entrusted to the quzis and pargana ganungos, their seal and signature being sufficient proof that the deeds were genuine. By Regulation XVII of 1803 the system was changed, and the work was entrusted to the officer styled the Registrar of the Judge's court at Moradabad, a fee being levied in each case and credited to Government. By Act VII of 1832 the work was made over to the Sadr amin, and this arrangement continued till 1864, when it was modified by the appointment of the tahsıldars as deputy registrars in their subdivisions, while the Judge of Moradabad became the registrar for the whole area under his jurisdiction. The last alteration in the scheme was the substitution of departmental sub-registrars at the tahsils in place of the executive officials. There are now sub-registrars at the four tahsil headquarters and at Chandpur, the office at the latter place having survived the abolition of the tahsil. The income from this source has grown steadily of late years, especially in the case of fees for optional registration. The average receipts for the ten years ending in 1906 were Rs. 11,160 annually, the charges for the same period averaging Rs. 4,900; there is but little difference in the matter of business done between the various offices, Najibabad taking the first, and Chandpur the lowest place.

Stamps.

Stamp duty seems to have been introduced with Regulation XLIII of 1803, the income thus derived being apparently the sole remuneration of the munsifs in whose courts the payment of duty was made. How long this lasted is not clear, but at

all events the munsifs obtained fixed salaries under Regulation XIII of 1824. The use of stamps on legal documents, however, continued to be obligatory, and the duty is now collected under the Indian Stamp Act and the Court-Fees Act, which represent the most recent stage in a long course of legislative evolution. A table given in the appendix shows the receipts from stamps, judicial and otherwise, for each year since 1891.* The amount is very considerable, and exhibits a constant tendency to increase. From 1872 to 1876 the average income was Rs. 66,800; from 1892 to 1896 it was Rs. 1,19,650; and from 1902 to 1906 the annual total had risen to no less than Rs. 1,53,800. Taking the average for the last fifteen years, it appears that some 76 per cent. of the total is obtained from. court-fee and copy stamps. This is not an unusual proportion. but the rise in the revenue from stamps points to an extensive increase in litigation, both the settlement operations and the introduction of the new tenancy law having had a marked effect on the volume of work done in the revenue and civil courts.

Before the mutiny no direct taxation was imposed, and Incomethe first step taken in this direction was the introduction of income-tax under Act XXXII of 1860 This affected all incomes of Rs. 200 and upwards, whether derived from land, trade or service; but its collection and assessment proved difficult and exacting, and under Act XVI of 1865 the minimum income was raised to Rs. 500 and the rates were lowered. The original measure was limited in duration to five years only, and accordingly the tax was abolished in 1865. Soon afterwards it was found necessary to impose a license tax on trades and. professions, but this lasted for a single year, and under Act IX of 1868 a certificate tax on incomes of Rs. 500 and over was introduced for a similar period. This tax was succeeded by a regular income-tax in 1869, the original rates of assessment being increased by one-half under Act XXIII of 1869. This was renewed by Act XVI of 1870, but the tax, assessed on all profits exceeding Rs. 500 at the rate of six pies in the rupee, was abolished in 1872. Another license tax was started

under Act VIII of 1877, in the first year realising Rs. 15,902, as compared with Rs. 52,644 collected under the former enactment in 1871. The last change occurred when Act II of 1886 introduced the present income-tax, though this again was modified in 1903 by the exemption of incomes under Rs. 1,000. Tables in the appendix show the amount collected in the whole district and in each tahsil for every year since 1890-91.* the ten years ending in 1903 the average revenue was Rs. 32,555, while for the three following years, when the new system was in force, the average dropped to Rs. 25,200. The persons with incomes of Rs. 2,000 and upwards, paying at the higher rate of six pies, contributed on an average Rs. 94 64 apiece, this figure implying an income of nearly Rs. 3,200. The average number of such assessees is about 150, the greatest proportion being residents of tahsıl Dhampur, and the lowest in Najibabad, though the latter is practically on a level with Nagina in this respect. They are chiefly merchants in sugar and grain, shopkeepers, moneylenders and pleaders.

Postoffice.

In early days the transmission of the official post was entrusted to the police, and no provision was made for private correspondence. In 1838 a Government post-office was opened at Bijnor, thus establishing communication with the headquarters of the adjoining districts, and at the same time Mr. R. Ker Dick, the magistrate, who did so much to improve the roads, started the district dak, regular mail lines being instituted so as to connect the town of Bijnor with the principal trade centres and police-stations, the cost being defrayed from a cess levied on the landholders. It was not, however, till 1846 or thereabouts that this district post was thrown open to the public, the rate of postage being two pice per packet. The Government post was greatly extended in 1866 and the following years, a number of the local mail lines being taken over from the district authorities and placed under departmental agency. This process has been gradually continued: in 1876 there were eleven imperial and eight district offices, the latter being mainly in the northern and eastern extremities of the tract, or at police-stations off the regular mail lines; while in 1906 the last of the local offices was

handed over to the imperial authorities. As will be seen from the list given in the appendix, there are now, in addition to the head office at Bilnor, 12 sub-offices, and 20 dependent branch offices. The mails are now carried as far as possible by rail, the introduction of the railway having brought about great modifications in the old arrangements; but a large part of the district is still served by runners, who are paid from imperial funds. The jurisdiction of the Bijnor postmaster extends beyond the limits of the district, taking in a considerable area in the south of Garhwal, but the offices coming under this head have not been included in the list. There are combined post and telegraph offices at Bijnor, Nagina and Najibabad, the two first being connected by a Government line along the metalled road; while in addition railway telegraph offices are maintained at the various stations.

administration and local taxation assume a very prominent part in this district. The towns of Bijnor, Chandpur, Dhampur, Nagina and Najibabad, were first constituted municipalities under Act XXVI of 1850 under a single notification of the 17th of April 1865; the provisions of successive enactments have been applied to them, and they are now administered under Act I of In each case the income is derived mainly from an octroi tax on imports, while in Bijnor a tax on professions and trades has been collected since 1895, and a similar tax has been levied in Nagina and Dhampur since 1903; other sources of income include receipts from cattle-pounds, the sale of manure, and the rents of municipal lands, houses and shops. Details of the income and expenditure under the main heads for each year since 1891 will be found in the appendix, and some further account will be given in the separate articles on the places in

The towns of Nihtaur, Sherkot, Seohara, Kıratpur, Mandawar, Act XX Daranagar and Afzalgarh have been administered under Act XX of 1856 since the 17th of April 1865, and Jhalu was added to the list on the 27th of August 1872. Formerly Barhapura,

question.* The Vaccination Act has been in force in each

municipality since 1891.

Owing to the unusually large number of towns, municipal Munici-

Qasimpur Garhi, and Rehar came into the same category, but the operations of the Act were withdrawn from the two first in May 1832, and from the last on the 1st of April 1901. Sahaspur also was made an Act XX town in 1873, but the place proved too poor to stand the imposition of the tax, and it was struck off the list a year later. In every case watch and ward are provided from the house-tax assessed by a representative committee of the inhabitants under the superintendence of the district magistrate. The balance is devoted to conservancy and to small public improvements. Details of the income and expenditure for the last three years will be found in the articles on each town. The provisions of the Sanitation Act regarding the water-supply were applied to the Act XX towns and also to Barhapura and Siau in January 1907. Section 34 of the Police Act is in force in the municipalities and the town of Sherkot.

District Board

Outside the urban area the local affairs are managed by the district board. In early days there were several distinct committees entrusted with the alministration of the various local funds, such as the road and school rates and the district dak cess. These were amalgamated into a single body known as the district committee which came into existence in 1871, and lasted till the formation of the district board with its widely extended functions and powers under Act XIV of 1883. By this arrangement the local or tahsil boards supplied one member apiece each year for a period of three years, the remainder consisting of the magistrate as chairman and the subdivisional The system remained unchanged till the introduction of the Act of 1906, by which the tahsil boards were abolished, and the members of the district board elected direct. now twelve such elected members, while the nominated element remains as before, though the chairman is chosen by election from among the members. The powers of the board have been extended in many ways, but their functions are not altered, and comprise the many miscellaneous departments, such as education, local communications, medical arrangements and institutions, cattle-pounds and many others: some have been dealt with already, but it remains to mention several of the most important. The income and expenditure of the board under the principal

heads for each year since 1891 will be found in the appendix.* As is generally the case, the bulk of the work falls upon the chairman, but Bijnor is fortunate in having several members who take an interest in the work and for many years have rendered good service.

Foremost among the duties of the board comes the management of the public educational institutions. In early days these did not exist, and instruction was afforded solely by the small toryindigenous schools; the mass of the population was wholly illiterate, and there was little desire for improvement. first practical step towards reform were taken in connection with the circular of 1845, directing district officers to ascertain the state of affairs in the matter of vernacular education, and this resulted in the submission of a report two years later. There were then 278 schools, attended by 2,301 pupils; of the former 174 were Persian, 89 Hindi, 14 Arabic, and one Sanskrit. The teachers in almost every case received a small fixed salary, but this was generally supplemented, and in some instances replaced, by allowances of food and other perquisites. Persian schools aimed at a more or less literary education, while in the Hindi schools nothing was attempted beyond reading, writing, and a knowledge of accounts. The Arabic institutions existed merely for the sake of instruction in the Quran, which was also taught in 55 of the Persian schools, and similarly the Sanskrit school at Nihtaur was of a purely religious character. The collector was directed to utilize the best of these indigenous schools, but the initial steps were of a very modest nature. Tahsili or pargana schools were started in 1856 at the five tahsil headquarters and at Nihtaur, and at the beginning of 1857 they contained 451 pupils; the remaining 247 schools had 2,336 scholars on the rolls, but these continued to be private establishments, though open to Government inspection. The mutiny did much harm to education, especially in Bijnor, where the development of rancorous hatred between Hindus and Musalmans accentuated the difficulty that had already been experienced in smoothing down differences of religion and caste so as to admit all classes to any school. In 1859, after ten months' tranquillity,

early his

the five schools contained 285 pupils, Dhampur having apparently dropped out of the list, while 3,375 children were attending the 402 indigenous schools. Funds were then obtained from tuition fees and a Government grant, the latter contributing three-fourths of the whole; but in the following year the reccipts from fees amounted to Rs. 524 out of a total expenditure of Rs. 1,400. In 1860 the first anglo-vernacular school was opened at Bilnor by the American Mission, which also started a school at Najibabad in the same year; the former was given a grant-in-aid in 1863, and at the same time a Government anglo-vernacular school came into existence at Bijnor, this being the parent of the present high school. In 1865 a new departure was made by the establishment of private middle-class schools at Sherkot and Tajpur, by the liberality of the zamındars, these being known as "subscription" schools; and two schools for girls were started by Government at Brinor and Chandpur. The mission school at Najibabad was raised to the status of a middle school, and operations were extended to Nagina in 1866.

Later developments.

So far there was but little attempt at co-ordination or at effective supervision of the aided and private schools; but in 1867 and the following year far-reaching reforms were initiated. The old tahsili school at Bijnor, which was now classed as an anglo-vernacular subscription school, was converted into a zila school of the inferior grade; and in the next place a school cess of one per cent. on the revenue was instituted, and from the proceeds halgabands or Government village schools were opened. This measure was introduced gradually, being first applied to the Bijnor and Najibabad tahsils in 1868, while it was not till 1872 that it was extended to tahsil Chandpur. The five tahsili schools remained the same as before, the other institutions of a higher class comprising the three mission schools, and the subscription schools at Sherkot, Tajpur, Kiratpur, Dhampur, Rehar and Puraini. The grants-in-aid were soon afterwards withdrawn from the four last, as being unnecessary in presence of the new cess: that at Dhampur again became a tahsili school, and the others were brought on to the halqabandi list. The latter has steadily increased up to the present day, absorbing the majority of the indigenous schools, while the remainder are, with

few exceptions, supported by a grant-in-aid, this system having of late years been revived with great and increasing success. Statistics of schools and pupils for each year since 1896 will be found in the appendix, as well as a list of all the schools in the district in 1906.* There is now the high school, with some 250 schools, and in addition there are two aided and four unaided schools in which English is taught. The former comprise the girls' boarding school at Bijnor, managed by the missionaries, and the Bullock school at Najibabad, started about twenty years ago and named after the then collector of the district; the cost was defrayed largely by the subscription of prominent inhabitants of the place. The unaided anglo-vernacular schools are of little importance and teach up to a very low standard. The vernacular secondary schools are eight in number and are all, or shortly will be, under the district board. The primary schools numbered 221 in 1906, including 14 girls' schools, and the number of pupils was about 8,700. No fewer than 122 of the former are aided, this system having proved very popular. Many of the schools owe their origin to local enterprise; a notable example is the girls' school at Nihtaur, recently founded by Chaudhri Debi Singh of Asaura in Meerut, who endowed it with Rs. 4,000, the management being entrusted to the district board. Further, there are 179 unaided schools, with some 2,570 scholars, 40 of whom are girls. These are mainly for teaching Sanskrit and Arabic in an elementary form, and are distinct from the mission schools which are maintained to the number of 60, with an average daily attendance of 430 pupils; 24 of these, with 200 pupils, are girls' schools, but with the exception of that at Bijnor, already mentioned, the majority are very small. Though the district board exercises a general control over the state schools and those receiving a grant-in-aid, the executive supervision is undertaken by departmental officers. The office of deputy inspector for Bijnor dates from 1855, while the first sub-deputy inspector was added in 1860, and a second was appointed in 1905.

The returns of successive enumerations illustrate to some Literacy. extent the progress of education in this district. The first statistics of this nature to be prepared were those of 1872, when

it was found that 5,556 persons or only 75 per cent. of the population were able to read and write. Female education was then unknown, and literacy was confined to males, the proportion in the case of the latter sex being 1.4 per cent. By 1881 a. marked improvement was noticeable, as 3.5 per cent. of the males and .09 per cent of the female inhabitants were literate. and since that time the figures have steadily risen. In 1891 they were 3 8 and ·12 per cent. respectively, while at the last census 3.9 per cent. of the male population and .15 per cent. of the females were thus classified, the combined total being 2.11 per cent. This figure is still very low, as compared with the provincial average, but it is identical with that of Moradabad, in which the history of education has been very similar, and much superior to the results achieved in Budaun. Literacy is morecommon among Hindus than with the Musalmans, for in the case of the male population alone the proportions of the literatepersons in 1901 was 382 and 3.44 per cent. respectively, the difference being greatest in the case of children. As is only tobe expected in a district in which Urdu is almost universally spoken, the Persian character is more generally known than the Nagri, though the difference between the two is not great; about 48 per cent of the literate persons were acquainted with the former script only, and 41 per cent. with the latter, while the remainder either knew both or were literate in other languages. English education has made very little headway, and the language is only known to one person in a thousand, this being but half the average proportion for the provinces.

Dispensaries. The public rospitals and dispensaries are under the management of the district board, though the immediate supervision and control are vested in the civil surgeon and his assistants. Of the latter one is in charge of the dispensary at the district head-quarters, and the other of that at Nagina, while the remaining institutions are entrusted to hospital assistants. The needs of the district in the matter of adequate hospital accommodation were recognised at an early date. It appears that the Sadr dispensary at Bijnor came into existence some years before the mutiny, while those at Nagina, Najibabad and Sherkot were added between 1860 and 1870. For the benefit of the south-

western portion of the district the Chandpur dispensary was erected in 1880, while in 1905 female hospitals were opened at Bijnor and Nagina. The two last are aided institutions, supported partly from the original endowments and subscriptions, partly from local funds and partly by a Government grant. There are also private dispensaries at Tajpur and Dhampur, maintained by the leading landowner in each case; and at Bijnor is the usual police hospital. All have accommodation for in-door patients, but the number of persons so treated is but a fractional proportion of the total attendance. In 1905 the latter aggregated 58,020 persons at the five district board dispensaries and 10,135 at the female hospitals. The figures for the private dispensaries are somewhat lower, but both do good work, and their existence is not only a credit to their supporters, but a real boon to the population of the neighbourhood.

A large number of cattle-pounds are maintained in the Cattledistrict, and many have been established for a long period. having been instituted soon after the mutiny. With the exception of those kept up by the municipalities of Bijnor, Nagina Dhampur, Najibabad and Chandpur, they are under the management of the district board; prior to 1891 they were controlled directly by the magistrate, but were handed over in that year to the local authority, and constitute an important source of income; the net receipts credited to the district board averaging Rs. 5,300 annually for the ten years ending in 1906.* They are now nineteen in number, and are located at Mandawar, Jhalu, Gani or Daranagar and Bashta in tahsil Bijnor; at Sherkot, Seohara. Sahaspur, Nihtaur and Nurpur in tahsil Dhampur; at Kiratpur. Nagal, Shampur and Laldhang in tahsil Najibabad; and at Afzalgarh, Rehar, Barhapura, Kot Qadir, Bawan Sarai and Kaurali in tahsil Nagina. They are thus to be found at every police-station except Amhera, and at five other places. Bawan Sarai and Kaurali are not shown in the map: the former lies on the road between Kot Qadir and Kotdwara, in the extreme north of pargana Barhapura, and the latter, which was started in 1903, stands about a mile north of the road from Nagina to Afzalgarh, near the right bank of the Ramganga.

pounds.

The receipts are largest in the neighbourhood of the forests, the most profitable pounds being those of Afzalgarh, Kot Qadir, Nagal and Barhapura.

Nazul.

The total area of nucul land in the district is 4,615 acres, distributed among all the different parganas. It consists for the most part of land acquired by Government for roads, schools, and other buildings, though in a few instances there are plots which have escheated to the crown, such as the sites of old forts at Najibabad and elsewhere. These are leased when of any value for agricultural purposes, and the proceeds are credited to the district board or else to the municipalities. The largest areas are 728 acres in pargana Najibabad, 689 in Bijnor, 654 in Nagina and 553 acres in Daranagar.

CHAPTER V.

HISTORY.

Materials for the ancient history of the district are at present scanty, though it appears probable that much awaits the explorer who will some day excavate the mounds of ruins existing in many parts.* A local legend relates that Sita's purification by fire took place at a site in pargana Bashta now marked by a temple called Sitabani; but the connection is obviously due to the name alone, and similar traditions are to be found in many The first legend of any historical pretensions is that districts. which ascribes the foundation of Bijnor to Raja Ben. Ben, Bin, or Bain, the Vena of the Mahabharata and the Puranas, is one of the minor hero kings of northern India. and though his name is less a household word than those of Rama, Vikramaditya and Salivahana, he has from the Punjab to Bihar a fairly familiar reputation as a Chakravarti or universal emperor. Named after him are castle mounds at or near Bijnor, Berni in Moradabad, Binawar in Budaun, Atranjikhera in Etah, and Kesariya in Champaran, near the Gorakhpur border. He has a tank within the great hill-fort of Rohtasgarh in Shahabad, adjacent to Mirzapur; and he is regarded as the founder of Soron in Etah and Kabar in Bareilly. Widely different periods are assigned to him in most of these places. In Bijnor, for instance, he is made contemporary with Rama, and in Etah with Shahabud-din Ghori (1202-1206). In Bareilly he is said to have been one of those Bhils who, with other aboriginal races, supplanted the Aryans in 1000 and 1400 A.D. Of his aboriginal descent other proofs are not wanting. Brahmanical writers have habitually sought to blacken his name and record his contempt for Hindu rites. It was he who allowed all men to mate themselves with women of any caste or country. To him, writes Manu, the custom of raising up seed to one's brother owes its sanction. "When he was inaugurated by the Rishis monarch of the earth,"

Ancient.

says the Vishnu Purana, "he caused it to be everywhere proclaimed that no worship should be performed, no oblation offered, no gifts bestowed on Brahmans." It was for this impiety, continues the same authority, that he suffered death: saintly men "fell upon the king and beat him with blades of holy grass consecrated by prayer and slew him." And now comes a yet stronger proof of Ben's aboriginal blood. From the thigh of his corpse, when rubbed by his murderers, sprang a man of dwarfish stature, flattened features, and charcoal-like complexion, the ancestor of the "inhabitants of the Vindhya mountains." By these mountaineers are intended the Gonds, Kols, Bhils and other aborigines of the Central Indian hills: and indeed in another Purana Bhils are mentioned by name as amongst Ben's posterity. The term Benbans is applied in various districts to subdivisions of the Ahir, Bansphor, Dabgar, Darzi, Dhalgar, Dharkar, Domar and Jhojha castes, besides the jungle Kharwars, and a small sept of Rajputs who are probably Kharwars by origin.

Antiquarian remains

It has been stated that the Malin river is possibly the Erineses of Megasthenes, and it is certainly the Malini of the dramatist Kalidasa, familiar to all readers of the Sakuntala.* We can only guess at the course of events in the early centuries of the Christian era, when the submontane tract in these provinces seems to have possessed an importance which it subsequently lost. Coins of the Kushan Vasudeva, and one of the later Kushan rulers with the cognomen Bhri Shaka, were found at Tip on the bank of the Ganges khadir.† Mandawar in the Bijnor tahsil was identified by St. Martin and General Cunningham with the Mo-ti-pu-lo of Hinen Tsiang, t but the identification is open to the usual doubts, though an attempt was made, without excavation, to recognise the objects described by the Chinese pilgrim.§ The kingdom of Mo-ti-pu-lo may certainly have included part of this district, and Buddhism still flourished. Clearer proof of the prevalence of that faith was afforded by the excavation of Mordhai (Mayuradhwaja) fort in the Najibabad tahsil. | A mound, 35 feet in height and 308 feet in circumference, was

^{*}J. R. A. S., 1894, p. 241. | † J. A. S. B, 1891, p. 1. | ‡ Beal, I, pp. 190—8, § C. A. S. R., I., p. 248. | || * J. A. S. B., 1891, p. 2.

found to have been a stupa, possibly surmounted in later days by a temple. The relic chamber had apparently been rifled, and was full of terra-cotta tablets, specimens of which are now in the Lucknow museum. The country round is covered with almost uninterrupted traces of ancient ruins.

It is impossible to ascertain the origin and nature of the early Hindu and Buddhist inhabitants. They were probably not of Arvan descent and their posterity may perhaps be traced in the low-caste population of to-day. The modern Brahmans are doubtless sprung from immigrants, as are certainly the Jats and the genuine Rajputs, in contradistinction to the inferior race which bears the proud name of Chauhan, but which can have no connection with the monarchs of old Dehli. At what period the new arrivals reached Bignor is a mere matter of The advent of the Musalmans drove the Hindus conjecture. eastwards and northwards beyond the great rivers and to the shelter of the forests; and this pressure was exerted gradually and was maintained for a course of many centuries. in Bijnor the refugees seem to have remained almost undisturbed. but the proximity of the famous Musalman settlements of Amroha and Sambhal seems to have prevented the formation of any local principalities of note or importance.

The annals of Bijnor under the early Musalman rulers of The early Dehli are to a large extent identical with the history of the mans country known as Katehr, which at first seems to have been included in the single government of Budaun and afterwards to have been divided between Budaun and Sambhal. There are no traditions connecting this district with the raid of Saiyıd Salar Masaud, nor is it clear whether Qutb-ud-din Aibak, when he captured Budaun in 1196, took any steps to bring the northern country under his subjection. A local legend, however, states that Mandawar, which had been rebuilt by Agarwalas of Dehli in 1114, was taken by the Sultan, who founded a mosque there in 1193, though the latter date seems improbable.* Qutb-ud-din left Shams-ud-din Altamsh in charge of Budaun, where he remained till his succession to the throne in 1210. Seven years later we learn that the monarch subjugated all the country as

Hindus.

Meerut was, however, taken in the preceding year. E. H. I., II, 207.

far north as the Siwaliks, and that he took Mandawar. It has been suggested that the town is the place of that name in Jaipur. but the identification seems clear enough, as it is expressly stated that it lay in or near the Siwalik hills.* The conquest was not yet permanent, and the successive governors of Budaun exercised but a nominal sway over the more remote parts of Katchr; but in 1254 Nasir-ud-din Mahmul led an expedition through the north of the Doah, and crossing the Ganges near Hardwar. continued his march along the foot of the hills to the banks of the Rahab, or probably the Ramganga. His progress was not unopposed, for the historian records that Izz-ud-din Daramshi was slain at a place called Tankala-wali, which yet remains to be identified, and that in his southward journey to Budaun the Sultan inflicted on the people of Katehr a lesson that they would not forget.† The cause of this measure on the part of Nasir-uddin is perhaps traceable in a casual statement that in 1248 one Malik Jalal-ud-din had been placed in charge of Budaun and Sambhal, the latter being for the first time mentioned as a seat of government, and that he was compelled to abandon his district owing to the disturbed state of the country. The importance of Sambhal does not seem to have been great as yet, for in the beginning of the reign of Ghias-ud-din Balban the country is referred to under the name of Amroha. On this occasion all Katchr was in a state of ferment, and the Sultan visited the people with exemplary punishment ‡ Another rebellion occurred in 1289, when Jalal-ud-din Firoz was on the throne, and this was quelled in the same terrible fashion. It may be true, as it is commonly alleged, that this Sultan founded the town of Jalalabad, but the story is unsupported by documentary evidence. The next casual reference is to the incursion of the Mughals in 1308 during the reign of Ala-ul-din Muhammad. The invaders entered Hindustan while the Sultan was in the Deccan, and keeping along the foot of the hills, made their way into Bijnor under Ali Beg Gurgan. Near Amroha they were met by Malik Kafur, who had been sent northwards with an army, and utterly overthrown.§ Some account of Bijnor at this period is to be found in the writings of the poet, Amir Khusru, who states that

^{*} E. H. I., II, 241, 342 | † 161d, 353. | \$ 161d III, 105. | § 161d, 47, 198.

when the Sultan quarrelled with his son, Khizr Khan, in 1315, he sent him in disgrace to Amroha, adding that the prince might have the country between that town and the hills as a hunting-ground; for game was so numerous there that "ten antelope might be killed with a single arrow."* But whatever may have been the state of the district then, it was rendered far worse in 1380, when Firoz proceeded to Katehr to repress the rebellion of Kharag Singh. He laid the whole tract waste, converting all western Rohilkhand into a vast hunting preserve. so that "nothing but game lived there;" and to prevent the recurrence of trouble he repeated the operation for several years. +

After the death of Firoz the kingdom fell into a state of Timur. anarchy and civil war, and by 1394 Nusrat Shah, the Sultan of Dehli, held only Sambhal and a few other districts in the vicinity of his capital. His more powerful adversary, Mahmud, was actually in possession of a portion of Dehli, but their quarrels were brought to an end by the news of Timur's invasion in 1398. The Mughals, after capturing Dehli, entered the Doab in the beginning of next year, and the right wing, under Pir Muhammad, crossed the Ganges at Firozpur in the Muzaffarnagar district. landing in the neighbourhood of Bijnor; while Timur himself continued his march higher up the stream, defeating a large force which was coming down the river in boats, and then crossing at Tughlaqpur, not far from the Balawalı feiry. There he was confronted by an army under Mubarak Khan, which largely outnumbered the Mughals; but the fortunate arrival of Shah Rukh and 5,000 horsemen, who had crossed lower down, enabled Timur to deliver his attack, with the result that the defenders were driven in headlong panic, abandoning their camp and losing a great proportion of their force. On the same day Timur proceeded northwards towards the Chandi hills with only 500 horsemen, and there fell upon another body under one Malık Sheikha, who also was defeated, his men being scattered in the dense jungle. Not content with this success, Timur achieved yet a third that day. hearing that another body of the enemy had taken up a position at the foot of the hills. These too he overthrew, owing mainly to the fortunate arrival of his son, Pir Muhammad, who had

marched up the country, ravaging and destroying every village on his way. * Timur then retired to the scene of his second battle, where he rested for the night; but the next day he continued his forward march towards Hardwar, again defeating his adversaries in the Chandi hills. With this action he appears to have been satisfied, for on that very day he recrossed the Ganges five miles below Hardwar, and retraced his steps eastwards. He may well have found this jungle warfare distasteful; there was little profit to be derived in so remote a tract, the rapid flight of his opponents baffled pursuit through the trackless forest, and it is not unlikely that the losses experienced by the Mughals were out of all proportion to the results achieved. To this day a gorge above Laldhang is said to mark the spot where many of Timur's followers were buried, though it is hardly possible that in so short a time tombs could have been erected. A more plausible suggestion is that the graves are those of the Rohillas who were encamped near that unhealthy spot some four centuries later. At all events the invasion of Timur was a mere raid, so far as this district was concerned. The Mughal forces were in the country for three days only, and great as the loss of life undoubtedly was, their presence could not have wrought any lasting effect.

Robellion in. Katehr.

When Timur left India, Nusrat Shah regained Dehli for a short period, but soon had to fly before the armies of Mahmud: but the latter was a man of no personality, and the power was divided between the various chieftains, pre-eminent among whom was the Saiyid Khizr Khan. In 1407 Ibrahim Shah of Jaunpur seized the opportunity afforded by the general confusion and marched on Dehli. Sambhal was then held by Asad Khan Lodi. but the place was taken after a siege of two days, and the country was placed in the charge of Tatar Khan, a Jaunpur noble.† The occupation was but brief, for Ibrahim hurriedly returned to his capital on hearing of a threatened attack from the south, and Mahmud soon recovered Sambhal, which was restored to the former governor. The Sultan; however, failed to follow up his success, nor did he pay any serious attention to the action of Khizr Khan in the west, but instead spent his time hunting in this district, allowing the affairs of state to fall into the greatest

disorder.* His passion for the chase eventually cost him his life, for in 1412 he again returned to the jungles of Katehr, and there contracted an illness of which he died. The nobles selected as his successor Daulat Khan Lodi, who seems to have brought this part of the country under his sway, by securing the submission of Rai Har Singh, the Hindu chieftain of Katehr, in 1413: but in the next year he was overthrown by Khizr Khan, who occupied the throne in all but name till his death in 1421.+ The new ruler at once devoted his attention to Katehr, which he had already laid waste in the beginning of 1414, while on his way to Dehli; he sent Taj-ul-Mulk to reduce Har Singh, and the latter was pursued from Aonla along the Ramganga as far as the hills above Bijnor. There he surrendered, and Taj-ul-Mulk turned back to attack the rebels in Etah and Farrukhabad. submission of Har Singh was but brief, for he again refused tribute in 1418, and at the same time rayaged the borders of Sambhal and Budaun. Once more Taj-ul-Mulk pursued him to the hills, but Har Singh retired into the mountains of Kumaun and the forces of Dehli had to retreat. The boundary of Katehr at this time seems to have been the Ramganga, so that almost all Bijnor was under the effective rule of the central government; for when in 1419 Khizr Khan himself proceeded against the Hindus, his campaign opened in the jungles along that river.t The results of this expedition were apparently small, for another attempt proved necessary in the next year, and then Har Singh at length agreed to pay tribute, though to all intents and purposes he remained unsubdued. Still Mubarak Shah, the successor of Khizr Khan, was able to collect the revenue in 1423, and a settlement was effected by which Har Singh's son entered the service of the Sultan, though in the following year it was found advisable to chastise the smaller chieftains of Katehr, and an army once more made its way through the forests to the foot of the hills. In 1430 the town of Amroha and the adjacent country was given to Saiyid Salim, a dependent of Khizr Khan, and this man and his sons appear to have administered the country for some years.§ His elder son, Saiyid Khan, was one of those who conspired with Allahdad Khan Lodi, the governor of

^{*} E. H. I. IV, 43. | + 1bid, 45. | 1 rbid, 50. | § 1bid, 68.

Sambhal, in 1434 against the powerful minister, Sarwar-ul-Mulk, and put the latter to death in Dehli. He received a substantial reward from Muhammad bin Farid, grandson of Khizr Khan, who was then on the throne; but he appears to have exchanged Amroha for other territory, as that place was assigned to Ghazi-ul-Mulk Jiman Khan.*

The Lodi Sultans

After the death of Muhammad, his incapable and inactive son, Ala-ud-din Alam, ascended the throne, but his authority over the nobles was of the slightest. The Lodis still held Sambhal. which was now governed by Darya Khan, who exercised sway as far north as the hills. Bahlol Lodi had already assumed the royal title, and in 1451 occupied Dehli, Ala-ud-din remaining content with the single province of Budaun. Darya Khan at first threw in his fortunes with Mahmud of Jaunpur, but soon repented and acknowledged his allegiance to Bahlol, by whom he was confirmed in possession of Sambhal.† Nevertheless he continued to intrigue with the rulers of Jaunpur, and was replaced by Mubarak Khan, who was defeated by Husain Shah, so that not only Budaun but all Sambhal passed for a time into the hands of the eastern king. The subsequent overthrow of Husain restored this district to the kingdom of Dehli, and nothing further is heard of the tract till 1493, when the Hindus seem to have been infected by the rebellion of the Rapputs in eastern Oudh and Jaunpur. Sikandar Lodi himself marched against them and crushed the insurrection after a well-fought battle. This ruler seems to have spent much of his time in the neighbourhood, for Sambhal was his residence from 1499 to 1503.8 The abundance of sport appears to have been the main attraction. though the inherent turbulence of the inhabitants of Bilnor necessitated close supervision. The governor was Qasim Khan Sambhali, who was still in possession when Babar arrived in Agra.

The Mughal conquest. The emperor, in 1526, sent Zahid Khan to take charge of the district, but the power of the Afghans was yet unbroken, and the Mughal forces were compelled to evacuate Sambhal, which became one of the strongholds of the opposing party. Humayun himself was despatched thither with a large force

^{*} E. H. I., IV, 81. | † ibid, V, 79. | ‡ ibid, 87. | § ibid, IV, 463.

in 1529, but was recalled by the news of Babar's death. The Mughal occupation was, however, established to some extent in the following years, for it is stated that in 1539, Haibat Khan Niazi and other Afghans drove all the Mughals out of Oudh and Rohilkhand and captured Sambhal, afterwards retiring to join hands with Sher Shah in the east; and again in 1541, when Humayun had been defeated, Nasır Khan was entrusted by Sher Shah with the task of recovering Sambhal.* This man rendered himself obnoxious by his tyranny, which produced a very disturbed state in the country, and his place was taken by Isa Khan Kalkapuri, a man of great distinction, who for many years ruled western Rohilkhand with a rod of iron, bringing the contumacious zamindars into subjection and compelling them to cut down the jungles which had hitherto afforded them a secure place of refuge. He was succeeded by Taj Khan Kirani, who became notorious during the reign of Islam Shah as the perpetrator of the treacherous murder of Khawas Khan, the faithful servant of Sher Shah. This chieftain had become estranged by the suspicious conduct of Islam Shah and was driven into rebellion in Mewat: thence he proceeded to Sirhind and afterwards into Bijnor, ravaging the parganas at the foot of the hills. On receiving a promise of pardon from Islam Shah he surrendered himself to Taj Khan, who forthwith obeyed his master's injunction by assassinating his prisoner.† Little information can be gleaned from the confused annals of the troublous times that followed on the death of Islam Shah. Practically there was no government, and the local zamındars were almost independent, as their adherence was sought in turn by the various claimants to the throne. We learn that for a time Sambhal was the headquarters of Ibrahım Suri, but his occupation does not seem to have been of long duration, nor to have affected this district, which was soon afterwards regained by Humayun and held by his youthful successor, Akbar.

Humayun gave the district to Mirza Askari, and afterwards Akbar. to the famous Bairam Khan, who left the post to become the guardian of Akbar. But the mere list of successive governors of Sambhal has little to do with the history of Bijnor, belonging rather

to that of Moradabad; and it merely remains to mention the few incidents that were directly connected with places in this district. The most prominent of these was the revolt of the Mirzas, relatives of Akbar, which took place in 1566.* The Mirzas were the sons of Ulugh Mirza, who had rebelled against Humayun, and were known as Sikandar and Muhammad Sultan; the latter had several sons, of whom the two eldest were Ibrahim Husain and Muhammad Husain. Akbar had given to Muhammad Sultan the pargana of Azampur, corresponding to the modern Bashta, while the sons had other jagirs in the neighbourhood. When the emperor was absent in the Punjab fighting with his brother, Mirza Hakim, the Mirzas rose in revolt and ravaged the neighbouring country; but on being opposed by the landholders of Bijnor, they turned eastwards to join Ali Quli Khan, Khan Zaman, who was then in rebellion in eastern Outh and Jaunpur. Disagreeing with the latter, they retraced their steps, defeating a loyal force in the Sitapur district, and plundered the country as far as Dehli. There they were checked by Munim Khan, Khan-i-Khanan, and in consequence they turned into Malwa, afterwards seizing Gujarat. A long and difficult campaign in that country broke the power of the Mirzas. but in 1573 Ibrahim Husain and one or more of his brothers returned to Azampur, where their arrival caused consternation among the jagirdars, who shut themselves up in Sambhal along with the weak and inactive governor, Muin-ud-din Khan Farankhudi. Matters became serious when Ibrahim attacked Amroha, but the situation was saved by the energetic though eccentric governor of Kant and Gola, Husain Khan Tukriya, who marched from Bareilly to Sambhal in one day, and urged immediate action. But the jagirdars refused to move, and Husain Khan at once set off against the rebels with his small force, with the result that Ibrahim crossed the Ganges, hotly pursued at the ferry of Garmukhtesar, and thus passed into the Punjab, where he was subsequently captured. The peace of the district was not again disturbed till the great military rebellion broke out in Jaunpur, headed by Arab Bahadur and others. After a chequered career, the insurgent leader was

[•] E. H. I. V, 315, 355, 505; VI, 123.

defeated in Oudh, and in 1582 turned westwards into Rohilkhand. Sambhal was then held by Hakim Ain-ul-Mulk, who defended Bareilly against Arab Bahadur and then drove him to the hills of Kumaun. There the insurgents remained in security for some time, raiding the submontane tract and disturbing the north of Bijnor. Eventually, in 1587, Arab Bahadur ventured as far south as Sherkot, where he was overtaken and killed by the servants of Nur Abul-Fateh, who then held that pargana.

Such casual references are of less value than the fiscal Akbar's records preserved in the Ain-i-Akbari, which afford some idea tration as to the general condition of the district at that period. The whole of Bijnor was included in the sarkar of Sambhal in the suba or province of Dehli. The tract was divided, as now, into fifteen parganas, but in several cases the names have been changed, and the modern areas known as Daranagar, Afzalgarh and Barhapura did not then exist. Generally, however, the identification is a matter of no difficulty. Bijnor was known by its present name, and included part of Daranagar: its cultivated area was 60,362 bighas, and the revenue 3,355,465 dams. This mahal was held by Tagas and Brahmans, who supplied 50 horse and 500 foot. The rest of Daranagar was comprised in Jhalu, a Jat pargana, which had 26,795 bighas under cultivation, paying 237,809 dams; the local levies were 50 horse and 400 foot. Mandawar was owned by Bais. the only Rapput zamindars mentioned in the whole district: it paid 1,256,995 dams on 65,710 bighas, the military contingent being 25 cavalry and 300 infantry. Chandpur then included most of the modern Burhpur as well as the existing pargana of that name. It had a cultivated area of 87,273 bighas, but the revenue was only 431,071 dams, though half as much again was assigned as suyurghal: the landholders were Jats, Tagas and others, the contingent being 50 horse and 200 foot. Bashta was then made up of two mahals, Gandaur and Azampur, part of the latter now lying in Moradabad. Gandaur had 18,577 bighas under tillage, assessed at 751,520 dams and Azampur paid 2,389,478 dams on 55,467 bighas; the owners in either case were Tagas, who furnished 60 cavalry and 500 infantry. The present

Najibabad tahsil contained the mahals of Kiratpur, Akbarabad and Jalalabad, the last being conterminous with the Najibabad pargana and no important changes have since taken place in the subdivision, though probably it did not then include the Chandi hills. Jalalabad, which was held by Jats, contained 49,393 bighas under cultivation, paying a revenue of 1,470,072 dains, and contributing 25 horsemen and 100 foot-soldiers. The zamındars of Akbarabad are not specified, while those of Kiratpur were Tagas and Jats: the former paid 640,264 dams on 53,791 bighas, the local levies being 50 horse and 200 foot; while the revenue of the latter was 900,496 dams, the cultivated area 80,973 bighas, and the military force 20 horse and 200 foot. The present Nagina tahsil was divided between the two mahals of Nagina and Islamabad; Afzalgarh did not come into existence till the days of Pathan rule, and, so far as it was cultivated, belonged to Nagina, while Islamabad practically represents the modern Barhapura. The zamindars of Nagina were Ahirs, a caste which is only mentioned in this connection and in the case of pargana Sardhana in Meerut; they contributed 50 horse and 500 infantry, and paid 2,647,242 dams on 99,233 bighas. Islamabad was either far smaller or far less developed; the landholders were Jats, who furnished a contingent equal in strength to that of Nagina, and paid 346,348 dams, the cultivated area being 25,261 bighas. The existing pargana of Dhampur was then and for nearly three centuries afterwards known as Sherkot. Though the cultivated area was only 19,870 bighas, the revenue demand was no less than 4,921,051 dams, while the zamindars, whose caste is not specified, provided no fewer than 100 cavalry and 1,000 footmen. Pargana Scohara was then composed of the two mahals of Seohara and Sahaspur, though a portion of the latter now lies in the Moradabad district. Both were owned by Tagas, who were responsible for 100 horse and 700 foot; the combined cultivated area was 82,789 bighas, and the revenue 2,278,036 dams. There remains pargana Nihtaur, which has undergone but slight alteration; this too was a Taga mahal, the area under tillage being 35,975 bighas, the revenue 1,738,160 dams, and the local contingent 50 horse and 300 foot.

These figures are in several respects highly suggestive. The The revearea under cultivation was surprisingly large, amounting to 475,918 acres or nearly 70 per cent. of the land now tilled. This implies a very high state of development, for it is hardly probable that the extent of forest was any less then than now, but rather the reverse; unless indeed the submontane tract was still thickly inhabited in Akbar's day. That this was once the case is certain: here and there the remains of ancient towns are to be seen in the jungles, as is also the case in the Bhabar of Kumaun, and though some may have belonged to an older era of civilization, contemporaneous with the ruins at Dhikuli in Naini Tal, it would appear that the old Musalman fortresses at Pir Zain-ul-Abdin, Saiyidbhura, Dharmagaihi and elsewhere, were not built in the midst of such forests as now surround them. Still the central and southern parganas were the most highly tilled, and the military force, amounting on paper to 680 cavalry and 5,400 infantry, testifies to the strength and density of the Jat and Taga population. The general prosperity is further evinced by the large amount paid in revenue. At the rate of 40 dams to the rupee the demand was no less than Rs. 5,85,600, to which must be added some Rs. 26,500 in the shape of sugarghal revenue assigned for some special purpose. This makes a total of Rs. 6,12,100, giving an incidence of Re. 1.28 per acre of cultivation; and if it be remembered that in Akbar's day the purchasing power of the rupee was fully four times as great as that of the present time, it will be obvious that the people of Bijnor were far more highly taxed than in the twentieth century, even after making all due allowance for the elasticity then permitted in the matter of collection.

For a considerable period after the reign of Akbar nothing is heard of Bijnor. Like the rest of Katchr, the district remained in peace, and never attracted the notice of the historians till the beginning of the eighteenth century. The tract continued to be administered from Sambhal, generally through the agency of a deputy, as in most instances the rulers of this rich government were favoured nobles residing permanently at court. The Katheriya Rajputs were still a power in the land, and in 1624 their leader, Raja Ramsukh, incurred the imperial displeasure by his

The latte Mughals.

oppression and by his invasion of the Tarai. He was overthrown and slain by Rustam Khan Dakhini, who in 1625 founded the city of Moradabad, which henceforward became the capital. This Rustam Khan seems to have held charge for a long period; he ultimately lost his life at Samogar in 1658, in the battle between Aurangzeb and Dara Shikoh, and his jagur of Sambhal and Moradabad was given to a pardoned rebel, Muhammad Qasim Khan, Mir Atish. Two years afterwards the latter was transferred to Muttra, and another long gap appears in the history. In 1713 Muhammad Amin Khan, Itimad-ud-daula, was sent to Moradabad by Farrukhsiyar, but was soon recalled in order to conduct the campaign against the Sikhs. The incursions of the latter seem to have thrown the country into a state of disorder, which became so serious that in 1717 no less a person than Nizamul-mulk was deputed to this government; he went there in person, and effectively subdued the rebels, returning to court in 1718.* The next year Moradabad was given to Farrukhsiyar's favourite, Muhammad Murad Itiqad Khan, but this man was merely a nominal governor, and was stripped of his estates by the Saiyids and Itimad-ud-daula after the murder of Farrukhsiyar.†

The Rohillas.

In 1726, during the reign of Muhammad Shah, the governor was one Sheikh Azmat-ullah Khan, who had to quell a rising in Kashipur and the Tarai, originated by an impostor named Sabir Shaht It is said that the insurgents were mainly Rohillas, a term applied to the immigrants from the hill country of Afghanistan, who had come to India in quest of military service. The whole country was by this time full of such adventurers, and many of them had made for themselves a settled home in Bijnor and the adjacent districts. Their power was not yet, however, established in these parts: the first leaders of note among the Rohillas were Daud Khan and his adopted son, Ali Muhammad, and their territories were confined to the neighbourhood of Aonla in Bareilly. But by 1737 Ali Muhammad was a person of great importance, having acquired much fame and the title of Nawab for his action in crushing the Barha Saivids in Muzaffarnagar. He then proceeded to extend his authority, and in 1742 defeated and killed Raja Harnand

^{*} E. H. I, VII, 469. | † 1bid, 479. | ‡ 1bid, VIII, 45.

Khattri, the governor of Moradabad, thus acquiring all Sambhal and Amroha. Such an act of rebellion was too flagrant to pass unnoticed, and a force was despatched against him under Mir Manu, son of Qamr-ud-din, the Wazir, who had hitherto secretly supported the Rohillas. Ali Muhammad thereupon proceeded with his army to Daranagar on the Ganges in this district, and then arranged a compromise with Mir Manu, to whom he gave his daughter in marriage with a large dowry, the result of this agreement being the retention of all Sambhal by the Afghans. In 1743 Ali Muhammad established his sway over all the country south of the hills, and continued in possession till 1746, when he was compelled to submit to Muhammad Shah in person at Bangarh in Budaun. For two years he was kept practically a prisoner at Dehli, but the invasion of Ahmad Shah Abdalı in 1748 enabled him to return. In the meantime Mora labad had been held by Farid-ud-din, the son of Azmat-ullah, and after his death by Raja Chhatarbhoj. The latter was at once displaced, for on entering the district at Nagal, Ali Muhammad gave the Jalalabad pargana to Najib Khan, annexed Dhampur and Sherkot, which had formerly been the property of his enemy, Safdar Jang, and allotted Rehar and other parganas in Moradabad to his officer. Dunde Khan. Having secured his position and patched up a truce with Safdar Jang, the old chieftain died, and his possessions were divided among his sons, though the real power was vested in the regent, Hafiz Rahmat Khan. The disappearance of Ali Muhammad gave a fresh opportunity to Safdar Jang, who persuaded the emperor to appoint one Qutb-ud-din as governor of Moradabad; but an attempt at obtaining possession of his charge cost that official his defeat and death at Dhampur at the hands of Dunde Khan. A second attempt was equally disastrous, for Qaim Khan of Farrukhabad was overthrown near Budaun by the Rohillas in 1750, and the Nawab Wazir was forced to look elsewhere for assistance.

The requisite aid was forthcoming from the Marathas, who joined Safdar Jang in his campaign against Farrukhabad, and then followed him in his pursuit of the Rohillas, who had with great ineptitude involved themselves in the troubles which befell the Bangash leaders. They were compelled to abandon Aonla,

The Marathas. and thence fied by way of Moradabad and Kashipur to the foot of the hills, where they took up a strong position in an entrenched camp at Laldhang on the submontane road. Here they were blockaded by the allies for a long period: several attempts were made to storm the works, but with no success, and on more than one occasion Najib Khan made vigorous sallies against the enemy's lines. The Maratha and Jat allies of the Nawab Wazir soon became discontented with this form of warfare, in which there was much fighting and little plunder, while the unhealthiness of the climate told severely on both forces. The news of a second inroad on the part of Ahmad Shah Abdali in 1752 afforded a suitable excuse for negotiations, and eventually the Rohillas agreed to pay an indemnity of fifty lakhs and an annual tribute, the bonds being handed over to the Marathas as consideration for their services. The district was then left in the possession of the Rohillas, being nominally the portion of Sadullah and Allah Yar Khan, sons of Ali Muhammad; but this arrangement does not seem to have been in any way final or permanent, for in 1754 they were superseded by Dunde Khan. Allah Yar died in the same year, and Sadullah ten years later, both being victims of consumption.

The Najib Rohi Khan.

This division of the Rohilla territory did not affect Najib Khan, who was secured both by his personal prowess and by his marriage with the daughter of Dunde Khan. He was a Qamrkhel Afghan, who came to India at an early age and enlisted in the service of Muhammad Khan Bangash, afterwards holding a subordinate command under the Wazir, Ghazi-ud-din, the elder of that name. He subsequently joined Ali Muhammad, who recognised his ability, giving him the feof of Jalalabad, as already mentioned. After the peace of Laldhang he increased his possessions, both in this district and in Saharanpur beyond the Ganges: and in a short time he became a prominent personage at the court of Dehli, obtaining the title of Najib-ud-daula about 1755, the year in which he founded Najibabad and the neighbouring fortress of Pathargarh. In 1757, when Ahmad Shah Abdali invaded India for the third time, he was governor of Saharanpur and bakhshi of the Empire, and his services rendered to the Abdali gained him the post of Amir-ul-umra. He was placed in charge of Dehli, but no sooner had Ahmad Shah turned his back on the capital than he was ejected by Ghazi-ud-din and Ahmad Khan and compelled to retire to Saharanpur. At that place he received Ali Gauhar, the fugitive prince, who afterwards became Shah Alam. Najib-ud-daula gave him an allowance of Rs. 50,000 a month, and attempted to enlist the support of the other Rohilla leaders; but the negotiations fell through, and Ali Gauhar was passed on to the care of Shuja-ud-daula, the Nawab Wazir of Oudh, in 1758. Ghazi-ud-din then obtained the aid of Sindhia and the Marathas in an attempt to crush his rival; and Najibud-daula, unable to meet their superior force in the field, entrenched himself at Shukartar, a foit on the right bank of the Ganges. opposite Raoli. Here he appealed to Hafiz Rahmat Khan and Shuja-ud-daula, but assistance did not reach him till after the rains of 1759, during which time he had with difficulty maintained his position. The first reinforcements consisted in 4,000 horse under Sardar Khan of Kot, who found that the Marathas had already entered Bijnor, and consequently threw himself into the fort of Sabalgarh, which stands near the confluence of the Kotawali and the Ganges in pargana Najibabad. On the arrival of fresh troops he attacked the Marathas, driving them from the district; their retreat seems to have been hastened by the advance of Rahmat Khan and the Oudh troops, by whose means the siege of Shukartar was raised. Ahmad Shah Abdalı once more afforded a pretext for a truce, and in 1761 the Maiathas were overthrown at Panipat. Najib-ud-daula then assumed the position of prime minister, and continued to hold the chief office in the state with much distinction till his death in 1770. In the same year died Dunde Khan, who was buried at Bisauli in Budaun, while Najibud-daula was laid to rest in a handsome tomb at Najibabad. He left three sons, Malu Khan and Kalu Khan by the daughter of Dunde Khan, and Zabita Khan, who succeeded to his father's estates. In the mean time nothing had occurred to disturb the peace of Bijnor. except in 1764, when the Sikh marauders of the Punjab in one of their many raids actually crossed the Ganges and ravaged all the country to the east as far as the town of Nihtaur. Nallb-ud-daula was then absent, and Hafiz Rahmat Khan was unable to reach the district before the Sikhs had withdrawn unscathed.

Zabita Khan.

When Najib-ud-daula died, the Marathas were once more on their way northwards, and Zabita Khan found that he was to be debarred from succeeding to his father's position. He therefore fled to Saharanpur, collected his forces, and took up a defensive attitude at Shukartar. Rahmat Khan did his utmost to dissuade his comrade from engaging so strong an enemy, but in vain: in December 1771 the Emperor and the Marathas attacked Shukartar, and Zabita Khan, finding that his opponents were already threatening his line of retreat, having crossed the Ganges near Chandi and repulsed the small force defending the river at that place, abandoned the fortress and retired hastily to Faizullah Khan at Rampur. Najibabad soon afterwards fell into the hands of the Marathas, who defaced the tomb of Najib-ud-daula, and then proceeded to plunder the district from end to end. The Rohillas seem to have been reduced to a condition of panic by this reverse: they fled without fighting to their strongholds at the foot of the hills, and thence sent the most urgent appeals for help to Shuja-ud-daula. The result was the treaty of the 15th of June 1772, countersigned on behalf of the Company by Sir Robert Barker, according to which the Nawab Wazir engaged to drive the Marathas out of Rohilkhand, and in return to be paid an indemnity of forty lakhs within three years. This agreement proved the downfall of the Rohilla power, but the end was hastened by the action of Zabita Khan himself, who in the following August entered into negotiations with the Marathas. His reasons were forcible, for his family was in the hands of the invaders, and their recovery was conditional on his defection, It is true that this step saved Bijnor from a fresh raid in the winter of 1772, but it seems probable that this weighed but little with Zabita Khan, who was reinstated in the government of Saharanpur and obtained the coveted title of Amir-ul-umra. Eventually his gain was but slight, for in 1774 Shuja-ud-daula. after fruitless attempts to secure payment of the promised subsidy, made war on the Rohillas and overthrew Rahmat Khan at Miranpur Katra.

Fall of the Rohillas.

Faizullah Khan of Rampur escaped from this disastrous battle, and fled to his home: there he collected his family and valuables, and once again the shattered Rohilla forces retired to

Laldhang. The Nawab endeavoured to come to terms with the enemy, offering a large annual tribute to Shuja-ud-daula and an indemnity to the English; but the latter were already pledged to place the country in the hands of the Oudh ruler, and Warren Hastings justly declined to interfere. The allied army reached Najibabad, which was occupied without opposition, and thence marched to Ratipur Mohan, on the road to Hardwar. From that point a line of outposts was thrown out, so as to intercept any convoys endeavouring to reach Faizullah's position, the intention being to starve the Rohillas into submission, as the supplies from the hills were obviously inadequate to maintain an army of forty thousand men. Faizullah, on the other hand, continued to fight, hoping that the climate would compel adversaries to withdraw: but the blockade was continued for a month or more, and eventually the Rohillas agreed to treat, and on the 7th of October 1774 a compact was effected, whereby Faizullah received the jagir of Rampur together with Rehar and other dependencies, reduced his army to 5,000 men, and promised allegiance and support to the Nawab Wazir. The remainder of his forces were banished from Rohilkhand, and it is estimated that 18,000 men with their families crossed into the Duab. Most of them joined the standard of Zabita Khan at Saharanpur, and fought on his behalf against the emperor's troops under Abdul Qasim Khan in 1775, and in various raids into Bijnor. But Zabita Khan had by this time ceased to have any real connection with this district, and his territory was confined to Saharanpur till his death in 1785. He left two sons: one the notorious Ghulam Qadir, who in 1788 blinded the unfortunate emperor Shah Alam and was afterwards tortured to death by the Marathas; and the other Muin-ud-din, generally known as Bambu Khan, who in 1803 was pensioned by the British and allowed to live at Bareilly, whence he was permitted to return to Najibabad in 1812.

The district thus passed into the hands of the Nawab Wazir of Oudh, and its history for a few years is identified with that of Shuja-ud-daula, who died at Fyzabad in 1775, and of Asaf-ud-daula, his son, who lived till 1797. The country was subject to the usual system of misgovernment by revenue farmers, who have left nothing but an evil reputation behind

Oudh

Zab Kha

Under the Pathan rule the tract was in a highly them. flourishing state, but the oppressions and exactions of the Oudh officials reduced it to a deplorable condition. No doubt it had suffered greatly from the inroads of the Marathas, but it is certain that the effect of the new maladministration was many times worse; land went out of cultivation, ownership and interest in the soil largely disappeared, the forest spread rapidly. and the depopulated state of the country rendered recovery impossible for years to come. The only incident which affected Bijnor during this unhappy epoch was the revolution at Rampur. resulting in the deposition and murder of Muhammad Ali Khan, the eldest son of Faizullah, by his brother, Ghulam Muhammad. in 1794. This necessitated armed intervention, and after the defeat of the Rampur troops at Bhitaura in Bareilly by Sir Robert Abercrombie and the Nawab Wazir, Ghulam Muhammad fled to the foot of the hills. The allied forces took up the pursuit, passing through Rehar, with the result that Ghulam Muhammad made his submission; but he still maintained a secret correspondence with the Rohillas, so that it was deemed advisable to remove him to Moradabad. A proclamation was then issued to the effect that the infant son of Muhammad Ali Khan would be installed as ruler of Rampur, on receipt of which the insurgents, after some delay, delivered up their arms.

Cession of the district Seven years later the district again changed hands. Saadat Ali Khan, who had succeeded to the throne of Oudh in 1797, after the deposition of Wazir Ali, found himself quite unable to meet his engagements to the English Company on account of the subsidies due for the support of a British force maintained in his territories. In extinction of the debt Rohilkhand, the Doab, and other tracts were ceded to the Company by the treaty of the 10th of November 1801. The transfer was effected without any disturbance, presumably because by this time the people realised that any change must be for the better. Certainly the state of the district could hardly have been worse, and the task that confronted the first collector, Mr. W. Leycester, who had charge of the large stretch of country included in the old district of Moradabad, was one of no mean difficulty.

The work of organization was proceeding quietly, when a rude interruption occurred from an unexpected quarter. Early in 1805, Holkar was reduced to great straits by the repeated successes of Lord Lake, and he conceived the brilliant idea of carrying the war into the enemy's country. His weapon was a large body of cavalry, composed of Pathans of Hindustan. south-country Hindus, and Afridis from the north-west; and their leader was Amir Khan, commonly known as the Pindari. He was a Salarzai Afghan, born near Sambhal, and had from his youth been a soldier of fortune: eventually he had thrown in his lot with Holkar, and had remained for many years faithful to that chieftain, fighting continuously on his behalf since 1798. On the 7th of February 1805 he crossed the Jumna at Mahaban. and then proceeded up the Doab as far as Parichhatgarh in Meerut. He experienced great difficulty in his endeavours to cross the Ganges, but at length discovered a practicable ford and passed into the Moradabad district, encamping at Dhanaura. Advancing the next day to Moradabad, he there met with a stubborn resistance on the part of Mr. Leycester; foiled in his attempts and hearing news of the arrival of General Smith, he left the town and marched by night to Kashipur, which was given up to plunder. Thence he rode to Tajpur, where nearly a week was spent, while plundering parties scoured the Tarai to the east. In the meantime Smith had reached Rampur, and Amir Khan, finding his position dangerous, proceeded once more to Kashipur, but subsequently turned back to Sherkot. Dhampur and Nagma. Pushing on with the remnants of his force, now reduced to two or three thousand sabres, he reached Najibabad, and then Kiratpur, where he halted to collect his scattered troopers. But Smith had been too quick for him, and at Kiratpur a skirmish ensued between the outposts of the two armies. Amir Khan saw that his opponents were too strong, but gave up all hope of eluding them, and with the object of tiring them out as far as possible, made his escape by way of Sherkot to Afzalgarh. The British force, however, followed with astonishing rapidity, and on the 2nd of March brought the raiders to bay. He drew up his force with his best troops in the centre, and his Afridi cavalry on the left. The latter were at once

Amir Khan, Zak

driven in flight by Smith's artillery, and while Amir Khan went to rally them, his centre and right met with the same fate. A bold charge by a picked body of horse was frustrated by Colonel Skinner and his cavalry; and nothing was left but flight. The invaders retired hastily to Rehar and Thakurdwara, and thence to Moradabad: Bijnor was now cleared of the enemy, the account of whose subsequent proceedings belongs more properly to the history of the Moradabad district.

1805 to

This petty campaign had no marked effect on Bijnor, and it is chiefly noticeable as a specimen of forced marching which reflected equal credit on both pursuers and pursued. Thereafter the peace of the district remained undisturbed, the only events of importance being the separation of Bijnor from Moradabad in 1817, the various revisions of the land revenue, and the occasional visitations of famine, to all of which some reference has been made in the preceding chapters. The sole occurrence that requires detailed mention in the subsequent annals of the district is the great rebellion of 1857.

The mutiny

The story of the mutiny in Bijnor is in many ways remarkable. Though there was no sudden upheaval nor were there any of those inhuman massacres and cowardly outrages which sullied the annals of so many districts, the course of events proceeded slowly and surely to an almost complete extinction of British authority; a rebel government was established with some show of sovereignty, and then the whole structure collapsed like a pack of cards. But what was more noteworthy than any other feature in the history of that brief epoch was the strong line of cleavage that developed from the first between Hindu and Musalman. The distinction of faith led immediately to the formation of rival and markedly antagonistic parties, and the followers of Islam proclaiming their allegiance to the throne of Dehli, it necessarily followed that their Hindu opponents declared themselves in favour of the Company and the British Crown. It must be admitted without reservation that, whatever may have been the proximate cause leading to the adoption of this standpoint, the loyalty of the leading Hindus remained unimpeachable, and probably no district can point to more noble examples of fidelity and devotion than were displayed by the most prominent Hindu landowners of Bilnor. It is only

fair to remark, however, that the exhibition of loyalty was not solely confined to the Hindus, for the names of the officials at the district headquarters, such as Saiyıd Ahmad Khan, Muhammad Rahmat Khan and Mir Turab Ali Khan, should never be forgotten; though these men, who did their utmost under the most trying circumstances, were natives of other parts of India, and were in no way connected with the Rohillas nor fired by the memories of former power.

When, on the 13th of May 1857, rumours reached Bijnor, though only forty miles distant, of the calamitous outbreak at Meerut three days before, the European population of the district lion. included Mr. A. Shakespear, the collector, his wife and child; Mr. 'G. Palmer, joint magistrate, Mr. R. Curie, a civilian on his way to the hills; Dr. Knight, the civil surgeon, and his wife: Mr. Lemaistre, the head clerk, his wife and three children; Mr. Johnson and Mr. Murphy, both clerks in the magistrate's office. together with the latter's wife and four children, and a Mr. Cawood. There was, perhaps fortunately, no military force stationed in the district, the nearest posts being those at Meerut, Roorkee, Mora Iabad and Saharanpur. On hearing the vague rumours of the mutiny at Meerut, Mr. Shakespear at once despatched hither some mounted police to ascertain the facts of the case. His emissaries found the whole country in an uproar, swarming with marauding Gujars and escaped convicts bent on nothing but plunder, and the extent of the disturbance at this early date may be judged from the fact that these Bijnor policemen were the first toestablish communications between Meerut and the outlying thana of Bahsuma in that district. The return of the sawars and their confirmation of the reports that had already arrived was immediately followed by overt acts of violence. Fortunately the Ganges rose suddenly and prevented incursions from the Doab, but on the 16th a bad case of highway robbery took place within eight miles of Bijnor, the offenders being the Gujars of Jhal and Olenda in pargana Daranagar, and this was followed by an open attack on the village of Shahbazpur Khaddar. On the next day a servant of Mr. Currie was robbed close to the station, and thereupon the collector sent requisitions for aid to the principal. landholders, and called upon all native soldiers on leave in the

ning of the rebel-

district to come in and do service at Bijnor. The summons met with an immediate response from the Chaudhris of Haldaur and Tajpur, while several non-commissioned officers and men of the irregular cavalry and other corps came in to assist the police force, to which considerable additions had been made. A new cause of alarm was the arrival from Saharanpur on the 18th of a company of the 29th N. I., passing through to join their regiment at Moradabad. The men were in a very uncertain frame of mind, and considerable relief was felt when they marched off without orders, in spite of the collector's efforts to retain them, a message soliciting sanction for this step having actually been sent forward to Moradabad. Their departure was most opportune, for on the 19th of May some 300 Sappers and Miners, who had mutinied at Roorkee, reached Najibabad, and there opened negotiations with the self-styled Nawab, Mahmud Khan, the grandson of Zabita Khan. The Nawab seems to have been anxious to avoid a disturbance at that place, but apparently instigated the mutineers to attack Bijnor. News of their advent preceded them, and the magistrate put his house in a state of defence; but the soldiers, who were short of ammunition, determined to make straight for Moradabad, hoping there to gain assistance from the disaffected 29th. Entering Nagina on the 21st of May, they plundered the market and the tahsil treasury, carrying off from the latter something over Rs. 10,000: thence they proceeded to Dhampur, but news of their coming had warned the officials at the tahsil, which was well adapted for defence and they were compelled to proceed without further gain. A fresh disappointment awaited the mutineers at Moradabad, where the troops, disaffected as they were, stripped them of their regimentals and relieved them of their spoil.

Outbreak in the Jail, Meanwhile a serious occurrence had happened at Bijnor. On the 21st the prisoners in the district Jarl, apparently with the connivance of the guard, broke out to the number of 341, and their complete escape was only frustrated by the timely arrival of the collector and Mr. Palmer, who rallied the guard, killed several of the fugitives and recaptured many more, and chased the remainder to the banks of the Ganges. There they took refuge on a sandbank, whence it was impossible to remove them before

nightfall enabled them to evade their pursuers. In all, 215 thus obtained freedom, and the outbreak would undoubtedly have had disastrous results had not prompt and energetic action been taken at the outset. The contents of the treasury were then secured by throwing all the money down a deep well, the mouth of which was commanded from the roof of the treasury building, Hardly had this been accomplished, when the Nawab of Najibabad arrived with a number of empty carts to remove the treasure to a more secure place. His chagrin at being forestalled was obvious, but he remained at Bijnor for two days without displaying overt disaffection; and the interval was employed by the collector in strengthening his position. He had by this time gathered round him the retainers of the leading Hindu zamindars, including a small body of horse, and with the latter he determined to take the offensive. In Mandawar and all along the Ganges the Gujars were engaged in systematic plunder, and their example had been followed by the Banjaras of the north and the Mewatis on the Moradabad border. The first expedition was directed to Chandpur, which was in great danger, and the destruction of a Mewati village restored comparative quiet in that quarter. On the 28th Mr. Shakespear's repeated requisitions met with a reply in the shape of 40 horsemen and 40 sepoys of the 29th N. I. from Moradabad, and this force was immediately despatched under Mr. Palmer to Mandawar. They fell in with a large body of insurgents at Fazlpur, to the north-west of that town, and dispersed them after inflicting on them considerable loss. The rioters comprised Jats from Bhoppur and Jahangirpur, Gujars from Sheikhupura and Husainpura, and Chauhans from Narayanpur; all these villages were burnt, and a large amount of stolen cattle and grain from the neighbourhood recovered.

This action did much to restore confidence, but only for a time. Evacua-On the 1st of June the unwelcome news of the Bareilly mutiny arrived, and at the same time Mahmud Khan returned to Bijnor with 200 well-armed men. Their presence at headquarters was most undesirable, and the Nawab was persuaded to lead them against the turbulent Mewatis of pargana Daranagar. Palmer was recalled, but his infantry, had given out that they would only remain loyal as long as, the Barcilly troops

held out, and they were despatched on the 5th to Moradabad. In the meantime the collector had relieved himself of some of the treasure, which afforded the chief ground of anxiety. Having sent word to Meerut that money was available in Bijnor, he was enabled to convey Rs. 50,000 to that place on elephants, in the charge of Lieutenant Gough and 19 men of the 4th Irregulars, who had been detailed to fetch it, on the 2nd of June. The bulk, however, still remained on his hands, and on the 3rd came a letter from Moradabad advising immediate flight. This was followed by an intimation from Meerut on the 6th that no aid could be expected from that quarter. The climax was reached the next day, when Mahmud Khan returned, in evident anxiety lest the treasure might escape his grasp and be handed over to the loyal Chaudhris. He was to some extent pacified by the assurances of Saiyid Ahmad, the subordinate judge, whose behaviour throughout was most creditable; but the situation was now desperate, and it was resolved to send off all the women and children to the other side of the Ganges. The Nawab, however, confessed that he could no longer control his men, and accordingly on the 8th of June Mr. Shakespear and the whole party quitted the district, eventually reaching Roorkee in safety on the 11th. He had previously ascertained that the Chaudhris were utterly unable to hold the country against Mahmud Khan, and had consequently made over charge to the Nawab, enjoining him to protect all private and public property, and to keep an account of the money expended, but not to collect revenue.

The Nawab's rule. The collector had given out that he would return in ten days and he genuinely hoped to fulfil this promise; but his many efforts to procure troops proved ineffectual, for every man was required at Dehli. Mahmud Khan at once assumed independence, proclaiming himself Nawab on behalf of the emperor, abolishing the standard weights, for which he substituted a ser of 100 tolas with his own seal impressed thereon, raising fresh troops, guarding the ferries, and sending all the treasure to his own house at Najibabad. He then proceeded to chastise the loyal Hindus, his first victim being Chaudhri Umrao Singh of Sherkot. For this purpose he deputed his nephew, Ahmad-ullah Khan, who was

in charge of the Najibabad tahsil; but another force was already in possession of the ground, in the person of a noted bad character named Mareh Khan, who was pillaging Sherkot and resented the intrusion. Ahmad-ullah eventually found it necessary to admit his rival into an alliance, with the result that in July the Chaudhri was compelled to fly with the loss of his property. The Hindus then saw that their only chance lay in combination, and a successful effort on their part ended in the expulsion of the Musalmans on the 5th of August, Ahmad-ullah flying by night to Najibabad. On the next day the Chaudhris of Haldaur, assisted by those of Bijnor, took advantage of the comparative isolation of the Nawab, attacked him, and drove him in precipitate flight to his home. The result was unfortunate, for though the town was saved, the rabble plundered all the property in the neighbourhood. Before news of this event had reached Roorkee, the collector had already superseded the Nawab, who was ordered not to quit Najibabad, and had entrusted the district to the Chaudhris, in the hope of strengthening their hands; but when he heard of Mahmud Khan's discomfiture, he delegated the entire management to Saiyid Ahmad Khan, the subordinate judge, and Mahmud Rahmat Khan, a staunch deputy collector. They assumed charge on the 16th of August, but their rule was only to last a few days. The Musalmans of Nagina and Najibabad had gathered together under the green flag of Islam, and marched on Bijnor, burning and plundering a large Jat village in the vicinity on the 23rd. Most of the Hindu levies were then at Nagina, and consequently the officials withdrew to Haldaur: Ahmad-ullah pursued them from Nagina, where he had overcome the Chaudhris' troops and burned the entire muhalla of the Bishnois, and on the 27th completely routed the Hindus at Haldaur. They then turned to Bijnor and took possession of the town, the Jat Chaudhris having fled across the river: the loyal officials also made good their escape, and so did Partab Singh of Tajpur, the latter going to Kanth in Moradabad and subsequently to Meerut, where he rendered excellent service on outpost duty.

No sooner had Ahmad-ullah withdrawn than the Hindus of Haldaur rallied and slaughtered all the Musalmans they could find. This was followed by a second expedition, and the Chaudhis mans.

Hidus Musal-

were besieged in their house, losing three guns, but they managed to hold out, and subsequently retired to Pheona. An attempt was then made to effect a truce, but without avail, as the Chaudhris refused to treat: a final action was fought at Haldaur on the 18th of September, in which the Hindus were defeated and driven once more to Pheona. In this manner the Musalmans established their supremacy throughout the district, signalizing the fact by a wanton massacre of Hindus at Sherkot. But the victors soon fell into difficulties owing to internal dissensions, and eventually a compromise was effected, Mahmud Khan being recognised as nominal Nawab with a monthly allowance of Rs. 12,000; March Khan and Ghazanfar Alı Khan, the Nawab's eldest son, receiving the Nagma, Dhampur and Chandpur tabsils; and Ahmad-ullah, the remainder of the district. In October, however, their authority was again threatened, for Chaudhri Budh Singh of Haldaur had persuaded the British officers at Meerut that the reoccupation of the district was feasible, and for this purpose Gulab Singh of Katesarin Bulandshahr and Gursahai of Hasanpur in Najibabad engaged to attack Bijnor from two points simultaneously. The effort was abortive, as the presence of a large Musalman force at Chandpur deterred the invaders, and the only result was the storming of Haldaur and the capture of Randhir Singh, who was sent a prisoner to Nambabad. This success attracted several noted rebels to the district from the Doab, including three of the Dehli princes; and the Pathans now began to extend their operations, raiding several police posts on the west bank of the Ganges. These petty successes were followed by a more ambitious attempt, as a large force crossed the river on the 5th of January 1858, burning the police-station of Miranpur, and two days later another expedition destroyed the canal offices at Mayapur. They were effectually checked, however, on the 9th, when Shafi-ullah Khan repeated his visit to Hardwar, and there fell in with a party from Roorkee under Captain Boisragon, by whom he was completely defeated. This blow was severely felt by the rebels, whose influence was now on the wane. Ahmad-ullah Khan endeavoured to enlist sympathy by remitting the revenue on old muafi lands which had been resumed by the British Government, but the effect was

small, and matters were not improved by the outbreak of fresh quarrels among the leaders. Eventually the Nawab's allowance was reduced to Rs. 8,000, and he was thrust further into the background. Ahmad-ullah being declared his representative; March Khan was given a large jagir in Sherkot and an increased monthly stipend; and Ghazanfar Ali Khan was recognised as heir-apparent of the Nawab. Such promises were of course but idle, as the leaders must have been fully aware that their position was, to say the least of it, uncertain, as they had full information of an impending attack from the north-west.

After the capture of Lucknow, Sir Colin Campbell directed a column to form at Roorkee and thence to march through district, Rohilkhand to Bareilly, where another Rohilla Nawab exercised a precarious sway. This force was commanded by Brigadier Jones, whose second-in-command was Colonel J. Coke of the 1st Punjab Infantry. It comprised a troop of the 9th Lancers, Cureton's Multani Horse, the 60th Rifles, the 1st Punjab Infantry, the 1st Sikhs, and the 17th Punjab Infantry, together with Austin's light battery and two 18-pounder guns. On the 17th of April the column crossed the Ganges at Hardwar, and Coke was sent on rapidly towards Nagal to meet the enemy who were known to be in strength in the forest. After covering four miles, Coke fell in with a strong body of rebels at Bhogniwala and having silenced their artillery let loose the Multanis, whose repeated charges drove the enemy headlong, causing them to abandon guns and baggage and to fly into the jungles with heavy loss. The next day a troop of the Multanis under a native officer. Imam Bakhsh Khan, boldly rode up to a fort in the direction of Najibabad, in which one of the rebel leaders and 500 men had taken refuge, obtained their unconditional surrender. disarmed them and turned them adrift, bringing their chief a prisoner back to camp. On the same day Jones pushed on with the main body and occupied Najibabad, where the Nawab's hall of audience was destroyed: the fort of Pathargarh was found empty, save for a number of guns and large quantities of ammunition and grain. Mr. Shakespear, who had accompanied the force, at once resumed charge of the district, making Najibabad

his headquarters: the tahsils and police posts were re-established,

Recovery

and every effort was made to induce the Muhammadans to return to their peaceful avocations. Much was effected in a short time, and even at that early period the police were able to enter the jungles and capture several relatives of the Nawab. But the district was far from pacified, and the rebels needed another severe lesson.

Battle of Nagina.

On the 21st of April Jones continued his advance, hearing that a force of 10,000 infantry and 2,000 cavalry had taken up a position at Nagina. Their front was protected by the canal. which was lined by ten guns, five more commanding a bridge on their left. The latter were engaged first, while the 1st Punjab Infantry and the Multanis worked round the enemy's right. When this outflanking movement was complete, the whole line advanced at the charge, and the rebels fled in panic, pursued, for a long distance by Cureton. On his return he laid a most successful ambush and overwhelmed a compact force of some 1,300 men and several guns, but the exploit cost the life of the gallant Lieutenant Gosling, who had already covered himself with distinction. This victory, of which a detailed account is to befound in the Cornhill Magazine of January 1863, was decisive. Bijnor was occupied without opposition, and Jones thence hastened onwards to Moradabad.

Restoration of order.

No further need was occasioned for military operations. The collector, on his return to Bijnor with the loyal Hindusand the captured guns, found that the people were rapidly resuming their normal pursuits, traffic was being reopened, and the collection of rebels in the forests was rapidly diminishing. He subsequently visited every part of the district, and by his firm and conciliatory attitude removed the last remnants of discontent. The Najibabad Nawab met with an inglorious death in prison, after being sentenced to transportation for life, and his property was confiscated, as also was that of other prominent rebels. On the other hand, the rewards for loyalty were numerous. Gifts of money and land were made to the faithful officials, including Saiyid Ahmad Khan, the subordinate judge, Mahmud Rahmat Khan, the deputy collector, Mir Turab Ali Khan, the tahsildar of Bijnor, and Radha Kishan, a Kashmur Brahman, who held office; as deputy inspector of schools and was afterwards made a tahsildar. The Chaudhris of Haldaur received a large grant of land, with a remission of revenue for Haldaur itself for a lifetime, while Randhir Singh was awarded the title of Raja. A similar honour was bestowed on Chaudhri Partab Singh of Tajpur, as well as land assessed at Rs. 2,500. The Chaudhris of Sherkot, the Jat Chaudhris of Bijnor the Taga Chaudhris of Chandpur, Nihtaur, and Ratangarh, as well as Bihari Lal Dube of Bijnor, Kesri Mal Bania of Daranagar, and Saiyid Muhammad Ali of Nagina, all of whom had remained loyal throughout the disturbance, were given khulats of money and grants of land in a like manner.

The total area given to lovalists was 27,901 acres, the largest proportion in any one pargana being 7,978 acres in Afzalgarh; Rajputs received 13,314 acres, mainly bestowed on the Sherkot family, Brahmans 3,005, Tagas 4,044, Banias 2,883, and Jats 2,622 acres, while the rest was given to Pathans, Saiyids and Ahirs. This did not, however, comprise all the land confiscated, which amounted to no less than 163,744 acres. A large share. 67,897 acres in Barhapura, was assigned to Raja Sheoral Singh of Kashipur in exchange for the Chachait estate in Bareilly: some 22,900 acres of forest land were retained by Government, and the remainder was sold by auction to the highest bidder. Curiously enough, the largest losers were Rajputs, who were despoiled of some 105,000 acres, mainly in Barhapura and Afzalgarh, the most prominent rebel being Rai Bhup Singh of Rehar. Next came Pathans with 19,000, Saiyids with 15,500, and Sheikhs with 7,500 acres. The Barha Saiyids of Nagina were particularly unfortunate, as almost to a man they threw in their lot with their old enemies the Rohillas.

Since the mutiny the annals of Bijnor have been uneventful, save for the occurrence from time to time of famines, revisions of the land revenue, and other matters of an administrative or economic nature, to which reference has already been made in the preceding chapters of this volume.

Subsequent history.

GAZETTEER

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BIJNOR.

DIRECTORY.

GAZETTEER

OF

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DIRECTORY.

AFZALGARH, pargana AFZALGARH, tahsil NAGINA.

The place which gives its name to the Afzalgarh pargana is a long and straggling town, standing in 29° 24 'N. and 78° 41' E., at a distance of 15 miles south east from Nagina and 34 miles from the district headquarters. The town is built on either side of the road from Nagina to Rehar and Kashipur, and this is crossed in the western portion by that from Sherkot to Kalagarh on the district boundary. On both these roads the passage of the Ramganga is effected by ferries, some two miles west of the town. The river's bed is at all times hable to change and in former years it flowed much nearer to the main site. To the north is the hill torrent known as the Dhara, and through the middle of the town flows a muddy streamlet called the Nachna. neighbourhood lies low, resembling the Nami Tal Tarai; water is found within twelve feet of the surface, and the dampness, combined with the general dirtiness of the place, renders it very feverish and unhealthy.

Afzalgarh derives its name and origin from one of the Rohilla sardars, Afzal Khan, a brother of Zabita Khan, who founded the town between 1748 and 1774. He also built the brick fort, of which the ruins, now overgrown with weeds and brushwood, are to be seen on the northern outskirts, the stronghold having been dismantled after the Mutiny. The place never attained much importance, save as the capital of a pargana and a local market, and it is now a mere collection of mud huts, interspersed with a few brick houses of the better type. Like the rest of the pargana, it has suffered much from the agricultural depression of late years. In 1853 the town contained 6,143 inhabitants, and this rose to 7,851 in 1865 and to 8,350 in 1872 At the following census of 1881 the total dropped to 7,797, but ten years later a temporary recovery was observed, the aggregate being 8,441. At the last enumeration in 1901, however, the decline was very marked, the population being only 6,474, of

whom 4,815 were Musalmans, 1,449 Hindus, and 210 of other religions, mainly Aryas and Christians. The majority of the residents are Julahas, who turn out large quantities of cotton cloth, both garha and gazi, of an excellent quality, some specimens obtaining a prize at the Agra Exhibition in 1867. This is the only manufacture of the place, the remaining trade consisting chiefly in timber, bamboos, and other forest produce. Markets are held twice a week, and a small fair takes place at Salabatnagar on the south-west of the town during March in honour of Bale Salar, while another is held in August at Ajabnagar to the north-east. Afzalgarh possesses a police-station built from the bricks of the old fort, a post-office, a cattle-pound, a large upper primary school, and an aided preparatory school.

The lands of the revenue mauza are 2,009 acres in extent, and of this some 950 acres are cultivated, the revenue being Rs. 1,230; the proprietor is Chaudhri Ranjit Singh of Sherkot. The town proper is 177 acres in extent, and has been administered under the provisions of Act XX of 1856 since 1865. The number of houses in 1906 was 1,851, and of these 743 were assessed to taxation, the income from the house tax for that and the two preceding years averaging Rs. 1,091, with an incidence of Re. 1-7-11 per assessed house and Re. 0-2-8 per head of population. The average total income, including the initial balance, was Rs. 1,539, and the expenditure Rs. 1,328; the chief items were Rs. 559 for the upkeep of the town police, Rs. 327 for the maintenance of the conservancy staff, and Rs. 320 for minor local improvements.

AFZALGARH pargana, tahsil NAGINA.

This is the most easterly pargana of the district, comprising an extensive stretch of country of a roughly triangular shape, with the apex to the south. To the east and south-east lie the districts of Naini Tal and Moradabad, the boundary in several places being formed by the Phika river, which falls into the Ramganga near the extreme southern angle. To the west are the parganas of Seohara, Sherkot and Barhapura, from which Afzalgarh is divided, for a large portion of its course, by the Ramganga; and on the north the pargana marches with Garhwal, the boundary

following the submontane road from Ramnagar to Hardwar. The total area of the pargana is 115,298 acres or 180 square miles.

Of this a considerable portion, 18,082 acres in extent, is reserved forest, occupying the north-eastern angle and forming part of the Garhwal forest division. From the western boundary of this block a strip of jungle extends along the northern border. Here the tree growth is inferior, clearings are numerous, and in some places cultivation has extended as far northwards as the road. This northern belt has a gently sloping surface, the deposit of soil resting on a bed of boulders and shingle from the hills beyond; it resembles in some measure the Bhabar of the Naini Tal district, but the peculiar characteristics of that tract are less definitely marked, the water level is much higher, and there is practically no Tarai intervening between the Afzalgarh forests and the level country to the south. The soil is a rich and heavy loam, with a constant tendency to clay: there is abundance of natural moisture, rendering irrigation unnecessary, but the unhealthiness of the climate and the ravages of wild animals render the tract constantly precarious and form a serious drawback to cultivation.

Below the forest tract lies the open country, which comprises three natural subdivisions. In the west, beyond the Ramganga and abutting on pargana Barhapura, is a small upland block with a somewhat uneven surface, a poor and sandy soil, and a good deal of jungle: it resembles the forest villages of Barhapura, and produces little besides cotton and the usual ribi crops. Next to this comes the valley of the Ramganga, which issues from the hills at Kalagarh and at first flows along the pargana boundary in a south-westerly course, but on emerging from the forest bends southwards and generally maintains this direction. The channel is very variable, the heavy floods by which the river is swollen during the rains causing sudden and extensive changes. Of late years there has been a westerly tendency, so that the fluvial area lies mainly to the east of the stream and has a considerable breadth. The soil in the valley is for the most part rich and productive, but there are few homesteads, most of the cultivators residing in the villages on the higher ground: tillage is scattered, and there are wide expanses of fallow, on which coarse grasses spring up with great rapidity. Under such circumstances it is not surprising that the tract should be highly precarious; at one time cultivation will extend to unusual limits, while at another depression sets in and large areas are abandoned. The natural facilities are, however, great, for irrigation is seldom necessary, and the superior crops, such as sugarcane, rice and wheat, yield a good outturn. On the other hand, in addition to the constant menace of a change in the river's channel, the tract is liable to suffer from saturation, especially in the immediate vicinity of the high bank marking the eastern edge of the lowlands. The series of wet years terminating in 1895 had disastrous results, and the deterioration was hardly removed by the ensuing period of drought.

The Ramganga has a deep and wide bed, in which quicksands are numerous, so that fording is only possible during the dry season at a few recognised places. It is fed by several streams which traverse the pargana from north-east to south-west, flowing in a direction parallel to one another. Such are the Dhara, Banaili, Phika, and the Kotirao, a tributary of the last, all of these being hill torrents, carrying little water for most of the year but subject to heavy floods after rain; and the Pili, a perennial stream which rises in the reserved forest.

These rivers effect the drainage of the eastern upland tract, comprising the greater part of the pargana. This has a good soil, chiefly loam and clay, of a more or less alluvial character and improving rapidly towards the south. It is closely populated and well tilled, the more valuable staples are largely grown, water is within easy reach of the surface, and, save in the case of garden crops, artificial irrigation is seldom requisite. The level surface is only broken by the watercourses, which have carved out deep beds for themselves and do not affect the land on their banks, and there are no tanks or jhils of any importance whatever. Taking the pargana as a whole, 50 per cent. of the area has a sawar or loam soil, 42 per cent. is clay, and 8 per cent. is the light loam known as bhur sawar, the area of sandy bhur being quite insignificant.

The economic history of the pargana is illustrated by the records of cultivation. At the ninth settlement 42,984 acres were

under tillage, while by 1865 this had risen to 57,178 acres, and though the increase was in part due to the resumption of revenue-free grants, there can be no doubt that the improvement was real. This high state of development continued unbroken till 1891, when as much as 59,010 acres were cultivated, the average for the preceding fifteen years being 58,756 acres. Then a decline set in, and by 1895 the total had dropped to 43,385 acres, and the area of new fallow rose proportionately. It was thought that the deterioration was but temporary, and little relief was given at the settlement, but the result proved otherwise, and the assessment would have broken down in the poorer tracts but for the wealth of the landlords and a speedy revision. For the five years ending in 1906, the average area under the plough was 46,508 acres or 40.3 per cent. of the whole. This shows a distinct improvement, which appears to be permanent, but it will necessarily be long before the old level is reached. Of the remaining area 15,490 acres or 13.4 per cent. are barren, including 8,264 acres under water and 3,705 acres occupied by village sites, roads and the like; and 53,300 acres or 46.3 per cent. as culturable, though this comprises not only the forest land and 588 acres of groves, but also 7,449 acres of new fallow and land prepared for sugarcane. The irrigated area is extremely small, averaging but 216 acres. but very little irrigation is required in normal years. Of the two main harvests the kharif covers 31,905 acres, and the rabi 25,986, while no less than 25 per cent. of the net cultivation hears a double crop; this is the highest proportion in the district, and the increase under this head betokens considerable progress, while at the same time it involves a large expansion of the rabi harvest. The chief autumn crops are rice, amounting to 56.7 per cent. of the khurif; sugarcane, 13.1 per cent., cotton, 11.8, and maize, 7.6 per cent. The last is grown more extensively than in any other pargana, and is a comparatively recent introduction. In the rabi 51.3 per cent. of the land is sown with wheat by itself, the next in order being barley, alone and in combination, with 13.9 per cent., gram with 11.9, oilseeds, chiefly lahi or rape, with 8.4, and masur or lentils with four per cent. The increase in wheat is very noteworthy, the area being greater than when the pargana was in its highest state of cultivation.

The cultivators of the pargana are principally Chauhans, and after them come Sainis, Sheikhs, Tagas, Banjaras and Chamars. In 1906 the total area included in holdings was 53,279 acres, although this was much in excess of the area actually cultivated. Occupancy tenants hold 45.5 per cent. and tenants-at-will 48.1 per cent., while 5.6 per cent. is proprietary cultivation, either sur or khudkasht, and the small remainder is rent-free or in the possession of ex-proprietors. Less than a third of the area is cash rented, and at the present time occupancy tenants pay on an average Rs. 5-8-1 per acre and tenants-at-will Rs. 5-2-4, the higher rate paid by the privileged class being due to the fact that they prevail in the better and more stable parts of the pargana. Some 4.25 per cent. of the area is sublet, the shikmi rental averaging Rs. 7-4-0 per acre. The revenue demand at successive settlements will be found in the appendix.* In 1898 an enhancement of 18.5 per cent. on the expiring demand was taken, but the hopes expressed of an early recovery were not realised, and the assessment broke down; in 1902 suspensions were granted to the extent of Rs. 6,055, and in the next year the pargana was practically resettled, the demand being reduced to Rs. 1,07,678. This reduction is only temporary, as 90 mahals are on a short-term settlement, which will expire in eight cases in 1909, and for the rest three years later; they have a total revenue of Rs. 32,360. The alluvial mahals along the Ramganga are 28 in number, and their revenue at the last revision in 1905 stood at Rs. 5,000.

Altogether the pargana contains 168 villages, divided at present into 300 mahals, of which 159 are held by single proprietors, 132 are joint zamındarı, seven are imperfect pattidari, and two are Government property. Of the resident proprietors the chief is Rai Lakhan Singh of Rehar, who owns 28 villages and belongs to the Gorwa family mentioned in chapter III. The Chaudhris of Qasimpur Garhi own six villages and one share, but the largest landlords reside elsewhere. Chaudhri Ranjit Singh of Sherkot owns 34 villages, and next comes Kunwar

^{*} Appendix, Table IX.

Randhir Singh of Tajpur with 15 villages and eight mahals; 11 villages belong to Kunwar Bhopal Singh, and seven to Kunwar Kirat Singh, both of the Kashipur family. One village and three mahals are held by the Banias of Thakurdwara in Moradabad. The proprietary communities consist chiefly of Chauhans, Sheikhs, Brahmans and Saiyids.

The population of Afzalgarh has fluctuated greatly during the past fifty years. In 1853 it numbered 60,130 persons, and this rose to 65,187 in 1865, but fell again to 62,870 in 1872. By 1881, however, it had reached 69,349, and ten years later was 69,099. The following decade witnessed a rapid decline, the density dropping from 375 to 248 per square mile, while the number of inhabitants in 1901 was 50,744, of whom 23,197 were females. Classified by religions, there were 33,754 Hindus, 16,721 Musalmans, and 269 others, chiefly Aryas and Sikhs. The only places of any note in the pargana are Afzalgarh, Rehar, and Qasimpur Garhi, each of which forms the subject of a separate article. Means of communication are poor, since the roads are unmetalled and inferior, progress being hampered by many rivers. Along the northern boundary runs the submontane road, from which branches lead to Rehar and Afzalgarh, taking off at Dharamandı and Kalagarh respectively. A road from Nagina to Kashipur leads through Afzalgarh and Rehar, and is joined in the Naini Tal district at Jaspur by the direct road from Sherkot, which traverses the southern extremity of the pargana, passing through Suawala and Muhammadpur Rajauri. Another road connects Afzalgarh with Sherkot.

The pargana in the days of Akbar was included partly in Sherkot and partly in Nagina, and it was not till the days of the Rohillas that it became a separate subdivision. About the same time Rehar was constituted a distinct pargana, being the feof of Dunde Khan. In 1774 the latter was attached to the territories of Faizullah Khan of Rampur, but after the rebellion in that State in 1794 it was annexed by Oudh and became a chakla under that government, including part of the Moradabad and Naini Tal districts. In 1845 the two parganas were amalgamated, the only subsequent change being the transfer to

Garhwal in 1886 of the small strip of land between the submontane road and the foot of the hills.

AKBARABAD, pargana Akbarabad, tahsil Najibabad.

The place which gives its name to the Akbarabad pargana is a small village standing in 29° 28′ N. and 78° 21′ E., some 18 miles north-east from Bijnor, and ten miles south from the tahsil headquarters, at the junction of the roads connecting Kiratpur with Nagina and Najibabad with Nihtaur. Tradition states that the early name of the place was Lakhoria, and that the name was changed during the days of Akbar, but nothing is known of its history, and it contains no old buildings. The population in 1901 numbered 1,121 persons, of whom no fewer than 944 were Musalmans. The village lands, which are traversed by the Gangan river, are 438 acres in extent, the cultivated area being 305 acres; they are held by Banias in joint zamindara tenure at a revenue of Rs. 602. There is a small weekly market here, a post-office and a lower primary school.

AKBARABAD pargana, tahsil Najibabad.

This, the smallest pargana of the district, occupies the south-eastern portion of the Najibabad tahsil, being bounded on the east and south-east by pargana Nagina, on the south by Bijnor, on the north by Najibabad, and on the west by Kiratpur, the dividing line being the Chhoiya river. It has a total area of 36,717 acres or 57:37 square miles, its length from north to south being about twelve, and its average breadth five miles.

The whole pargana lies lower than the country on either side, and the soil is for the most part clay or a good loam, the former constituting 35.5 and the latter 58.4 per cent. of the area, while the small remainder is lighter, with an inclination to sand. This poor soil occurs only on the banks of the Chhoiya, Ban and Gangan rivers, by which the tract is drained. The first of these is a watercourse of insignificant dimensions and generally dry in the cold weather. The Ban originates in three drainage lines towards the north of the pargana, which unite to form a single stream, ordinarily of meagre size, but swelling to a considerable volume during the rains. Like the other rivers, it flows from north

to south, entering pargana Bijnor at Gopalkheri. The Gangan for a few miles follows the eastern border, first touching the pargana at Kheri; at Naqipur Bamnauli it is fed by the Pilkhala, a stream which rises in the Nagina tahsil. The river has a deep bed with steep banks on either side, rendering irrigation impossible; but for the same reason it does not inundate the country in its neighbourhood, as do the other streams, when swollen by the rains. A large area is then flooded, greatly limiting communication between the villages, but the natural slope of the country renders the drainage rapid, and the silt deposited by the streams is almost invariably beneficial. Besides the rivers mentioned there are one or two minor watercourses: such are the Karula on the eastern border-not to be confounded with the river of that name in tahsil Dhampur; -and the Paodhoi or Khalia, a small affluent of the Chhoiya, with which it unites at Padla. various places, and especially in the south of the pargana, there are jhils and ponds, sometimes of considerable magnitude; they are useful for irrigation, when required, and also produce an abundance of wild rice, known as dhaner or pusawa, which is largely used as fodder for cattle. Irrigation is also provided by the Ranikota branch of the Nagina canal, which traverses the north-eastern corner, watering Mirzapur and three other villages. Wells, too, can be dug almost everywhere, and the water level is high, so that the tract should never suffer in years of drought.

Small as it is, the pargana is by no means uniform in character. East of the Ban the land is much inferior to the rest, with more sand in the soil, which is locally described as *khapur*; but the remainder has a firm and productive soil and is of great value and fertility, except along the banks of the Chhoiya. The general standard of development is high. In 1835 the area under tillage was 19,599 acres, and this rose to 25,342 acres thirty years later. The rate of increase has been well maintained, as for the five years ending in 1906 the cultivated area averaged 27,009 acres or 73.6 per cent. of the whole. The double-cropped area is 17.7 per cent. of the cultivation, and has also expanded, though much of the clay soil is too stiff to be worked except in the rains. The land classed as barren amounts to 4,088 acres or

11.1 per cent., but this comprises 1,713 acres under water and 1,872 acres occupied by sites, buildings, roads, and the like, so that the amount unfit for cultivation is very small. The culturable area, 5,620 acres or 15.3 per cent., includes 511 acres of groves and 1,050 acres of new fallow or land prepared for sugarcane, so that only 3,159 acres of so-called old fallow are left for further cultivation. The irrigated area is ordinarily very small, averaging but 264 acres, though this is capable of great expansion, and merely represents the land served by the canal.

Owing to the nature of the soil, the *kharif* is far the most important harvest, averaging 20,334 acres as compared with 11,348 acres sown in the *rabi*. No less than 58.5 per cent. of the former consists in rice, this being the highest proportion in any pargana of the district; it is followed by sugarcane with 16.2, and cotton with 5.3 per cent., the remainder being chiefly pulses and *juar* grown for fodder. In the *rabi* wheat leads with 48.3 per cent., and then come barley, sown alone and in combination, with 27.8, gram with 16.3 per cent., this crop generally succeeding rice, and oilseeds with 4.6 per cent. As in all parganas, the character of the crops has greatly improved of late, the most striking innovation being the substitution of wheat, rice and sugarcane for the inferior and less profitable staples.

The most prominent cultivators of the pargana, and by far the best agriculturists, are the Jats, and after them come Chamars, Sheikhs, Brahmans, Malis and Kahars. In 1906 the recorded area of all holdings was 29,167 acres, and of this 14.9 per cent. was cultivated by proprietors, 36.4 per cent. by occupancy tenants, and 48 per cent. by tenants-at-will. Rents are paid mainly in cash, and vary but little throughout the pargana, the present averages being Rs. 4-11-2 for occupancy tenants and Rs. 6-5-3 per acre for tenants-at-will. The area sublet is insignificant, and consists generally of inferior land, the shikmi rental being Rs. 5-2-8 per acre. The revenue demand has increased steadily during the past century, as will be seen from the table given in the appendix. At the last revision an enhancement of 30 per cent. was imposed on the pargana, and the present incidence is somewhat higher than the general average for the district.*

^{*} Appendix, Tables 1X and X.

There are 136 villages, now divided into 248 mahals, of which 68 are held in single, and 163 in joint zamindari tenure; six are perfect pattidari, five are bhaiyachara, five are imperfect pattidari, and one is Government property. The proprietors are chiefly Jats, Banias, Musalmans and Chauhans, but most of the villages are owned by non-resident landlords. The Jat family of Sahanpur holds 18 villages, and the Muftis of Kiratpur have between them 16 villages and three mahals. Other landlords comprise the Chauhans of Haldaur, the Banias of Najibabad and Kiratpur, and the Saiyids of Memon. The proprietary communities of the pargana are of little importance, the chief being the Jats of Kumhera, Ghazipur and Sikri, and the Rajashahi Banias of Begampur Shadi.

The population has increased but little during the past 50 years. In 1853 it numbered 22,176 souls, and this fell to 21,884 in 1865, but rose again to 24,260 in 1872. Another decline occurred in 1881, when the total was 22,275, while ten years later it was 25,815. The last census in 1901 again witnessed a decrease, the number of inhabitants being 25,237, of whom 12,121 were females. The total included 18,588 Hindus, 6,767 Musalmans, and two Christians. The pargana possesses no town, and in fact the only place which contains a population of a thousand inhabitants is Akbarabad. Means of communication are somewhat deficient, for though the railway passes close to the eastern border and traverses the extreme north-eastern corner, there is no station within the pargana limits, and the only roads are those from Kiratpur to Nagina and from Najibabad to Nihtaur, crossing one another at Akbarabad, and that from Kiratpur to Nihtaur in the south-western extremity of the tract.

AMHERA, pargana DARANAGAR, tuhsil BIJNOR.

A small village standing in 29° 16′ N. and 78° 17′ E., on the road leading from Bijnor to Moradabad, at a distance of 12 miles south-east from the district headquarters. Through it passes a second road leading from Haldaur to Chandpur, and at the junction there is a police-station, which it is now proposed to remove to Haldaur. Apart from this the village contains nothing of any importance. It had in 1901 a population of only

635 persons, of whom 280 were Musalmans. The total area is 648 acres, of which 490 acres are cultivated, and is held in bhaiyachara tenure at a revenue of Rs. 670 by Chauhans, Banias. Tagas, Saiyids and Kayasths.

BALDIA, pargana DARANAGAR, tahsil BIJNOR.

This small village lies two miles to the north-west of Haldaur, and nine miles south-east from Bijnor, in 29° 18′ N. and 78° 15′ E., about a mile north from the junction of the roads from Bijnor to Moradabad and from Daranagar to Nihtaur. The place is officially known as Baldia Jogidaspur, and at the last census contained 477 inhabitants, almost all of whom are Jats. It has an area of 321 acres, of which 200 acres are cultivated, and is held by Jats, Banias and Chauhans in bhaiyachara tenure at a revenue of Rs. 390. Its only claim to mention is that it is the scene of a large annual fair held in September on a sandy plain near the village, in honour of Burhe Babu. The attendance, however, is no longer so large as was formerly the case, but the gathering still provides an opportunity for a good deal of trade, especially in cattle, mules and donkeys, and is extensively frequented by the Kumhars of the district.

BARAMPUR, pargana KIRATPUR, tahsil NAJIBABAD.

A considerable village standing in 29° 34′ N. and 78° 12′ E., at a distance of five miles north from Kiratpur and nine miles from the tahsil headquarters. It deserves mention as giving its name to a station on the main line of the Oudh and Rohilkhand Railway, though this is actually situated in Raipur Muazzampur, an adjoining village on the east. The station is some way from a road and is approached only by rough cart tracks. Barampur had in 1901 a population of 1,280 persons, including 185 Musalmans and a large community of Rawas, who have extensive alluvial cultivation in the valley of the Malin, which skirts the village on the north, east and south. The place possesses an aided primary school and a bazar in which markets are held twice a week. The village lands are 846 acres in extent, the cultivated area being about 570 acres, and are assessed at the high figure of Rs. 2,800. The proprietors are Rawas, who hold the village in imperfect pattidari tenure.

BARHAPURA, pargana BARHAPURA, tuhsil NAGINA.

The place which gives its name to the Barhapura pargana is a small town standing in 29° 31' N. and 78° 32' E, at a distance of nine miles north-east from the tahsil headquarters, miles south-east from Najibabad and 27 miles from Bijnor. is connected with the two former places by unmetalled roads, and two rough tracks lead eastwards to join the submontane road at Kala Shahid and Kalagarh. The town is built on a narrow strip of land between two streams, which rise in the forest to the north and unite a short distance to the south to form the Uni, a somewhat important tributary of the Khoh. Being situated on the very fringe of the forest tract, the place suffers from the unhealthiness of the climate, and possesses little commercial or other importance. It contains a police-station, a post-office, a cattle-pound, an upper primary school, and a bazar in which markets are held twice a week. For some years it was administered under the provisions of Act XX of 1856, but the measure was withdrawn in 1895 in consequence of the poverty and insignificance of the place. The population in 1872 numbered 4,062 souls, and by 1891 had risen to 5,114; at the last census, however, a marked decline was observed, the total being 4,208, of whom 2,303 were Musalmans. The revenue mauza has an area of 393 acres, of which about 150 acres are cultivated, and forms part of the estate belonging to the Raja of Kashipur.

About three miles to the east, in the middle of the forest, is the old fort and ruined city of Parasnath. The outlines of the quadrangular fortress are still traceable, but it consists merely of heaps of bricks interspersed with fragments of sculpture and masonry. Similar ruins are to be found throughout a large area in the vicinity, but nothing is known of the history of the place, as is the case with so many of these old cities in the submontane forests. It has been suggested that the remains are of Jain origin, though the supposition is probably derived from the name, Parasnath being one of the chief Jain tirthankaras; but it is certain that at one period all this tract was inhabited and in a prosperous condition, and the ruins are probably contemporaneous with those of Mordhaj, which are separately described, and also those at Dhikuli and Kashipur in the Naini Tal district.

BARHAPURA pargana, tahsil NAGINA.

The pargana of Barhapura comprises a large stretch of country extending southwards from the Kandi Sarak or submontane road and the Garhwal district to the border of pargana Dhampur. To the east lies Afzalgarh, the boundary for some miles being the Ramganga river, and to the west Najibabad and Nagina, the latter being separated by the Khoh.

The total area is 112,189 acres or 175 square miles, but by far the greater portion of this is covered with forest, which forms an almost continuous belt along the northern border. places it stretches southwards for a considerable distance, but elsewhere cultivation has been pushed forward as far as the district boundary. It still occupies about 60 per cent. of the area, and comprises practically all the upland, as well as a few villages in the valleys of the Khoh and Gangan to the extreme In the north and east the jungle is dense and clearings few and far between; but elsewhere the work of reclamation has been carried on steadily and great strides have been made during recent years. The level surface is interrupted by numerousravines and drainage channels, and the country in some degree resembles the Bhabar of Naini Tal; the soil is fertile, but of no great depth, and water lies too far below the ground to be available for irrigation; the climate is unhealthy, the population sparse, and the crops are at all times liable to the ravages of wild animals.

The north-western portion of the pargana is of a different character. Between the Khoh and the Gangan is a strip of semi-alluvial land, with a rich loam and clay soil, a high water-level that renders irrigation unnecessary, and stable cultivation, though the proximity of the forest constitutes a serious drawback. The centre of this tract is the small town of Kot Qadir, to the south of which flows the Nagina canal, originating in the Khoh at Jahanabad; but it is very little used in this pargana, the area watered from it being hardly more than a hundred acres. Further east comes the valley of the Khoh, which consists of two distinct levels or terraces, the lower being subject to fluvial action in the annual floods, while the upper has a fertile soil and is in a high state of cultivation, where beyond the reach of the forest's

influences. The soil in the lower level changes year by year, and the villages are on the alluvial register; but the amount of cultivation is insignificant, and most of the villages are included in the revenue-free estate of the Kashipur Raja. This tract extends as far south as the Dhampur boundary, and covers a considerable area. It is traversed in the north by numerous tributaries of the Khoh, most of which originate in the lower hills and flow through the forest in a south-westerly direction. Excepting the Saneh, which hardly affects this pargana, none are of any importance till the Uni is reached. The latter is formed just below the town of Barhapura by the junction of three streams, and thence flows in a somewhat variable course to join the Khoh near Mohiuddinpur. It does considerable damage to the villages on its banks, and many of them are classed as alluvial. The only tributary of the Khoh on its right bank is the Sukhrao, which rises in Garhwal and joins the larger river at Jahanabad, just above the canal headworks. The Ramganga flows through the forest tract, and its khadir is here uncultivated. so that its influence on the pargana is almost negligible; it is fed by many ravines and watercourses leading down from the forest uplands and carrying off the large volume of surface drainage that has to be dealt with as the result of a remarkably heavy rainfall.

The inherent precariousness of the tract has necessarily affected its economic development. The earliest record for the entire pargana is that of 1867, when 29,911 acres were cultivated. This included the revenue-free area, the assessable remainder being 17,415 acres, as compared with 8,609 acres in 1835. The total rose steadily till 1891, when it reached 37,823 acres, the average for the preceding fifteen years being 32,277 acres. But then a serious decline set in, from which the tract has not yet wholly recovered. A series of years with an exceptionally heavy rainfall, added to a greatly increased mortality, appears to have been the principal cause, and at all events the cultivation by 1895 had dropped to 25,966 acres. Still the pargana did not suffer so acutely as its neighbour Afzalgarh, and an improvement was distinctly visible in 1899, since which time it has been well maintained. For the five years terminating in 1906, the average

area under the plough was 34,210 acres or 30.5 per cent of the whole, while as much as 19.2 per cent. of this bore a double cropin the year. The proportion is of course very low, but Barhapura cannot be compared with the rest of the district on account of the large extent of forest. The barren area is shown as 11,439 acres or 10.2 per cent., but this includes 7,655 acres under water, or at any rate so covered during the rains, as it is the common practice to include the whole river bed in this category; and 1,686 acres occupied by roads and sites, leaving but 2,098 acres of land actually unfit for cultivation. The remaining 66,540 acres are mainly forest: there are 5,186 acres of new fallow. which may fairly be taken as intended for cultivation, and 397 acres of groves, while of the rest 12,143 acres are shown as old fallow, so that apart from the forest there is clearly room for much extension of tillage. Irrigation is almost unknown, and where practicable is unnecessary: the average area watered is but 220 acres, supplied either from the canals or from wells.

The pargana differs from other parts of the district in that the rabi and kharif areas are practically equal, the former averaging 20,410, and the latter 20,204 acres. This was not always the case, for in 1867 the figures were 12,495 and 15,742 acres respectively, so that the greater proportionate increase in the rabi seems due to the expansion of the double-cropped area. The chief rabi staple is wheat, sown alone, averaging 50.4 per cent. of the harvest. Next comes barley, alone and in combination, with 14.2 per cent., and then oilseeds with 126 per cent., the latter consisting principally in lahi or rape, which is grown to a larger extent in this pargana than elsewhere. Gram, peas and masur constitute the bulk of the remainder. In the kharif rice and cotton are the most important, averaging 422 and 23.1 per cent. of the area respectively; they are followed by sugarcane, 11.5 per cent., a very low figure for this district, while the balance comprises the pulses, bajra and arhar mixed, the smaller millets, and maize. Under the circumstances, the character of the crops is distinctly good, and in spite of depression there has been a noticeable improvement in this respect.

The standard of cultivation is generally lower than in any other part of the district, though this is due rather to the physical

disabilities of the tract than to the composition of the tenautry. The chief cultivating castes are Chauhans, Sainis, Chamars, Jats and Musalmans of various descriptions. The forest villages are generally occupied by Banjaras, who carry on their profession of cattle farming in addition to agriculture. In 1906 the area included in holdings was 36,385 acres, or considerably more than the area under actual cultivation. Of this only 3.5 per cent. was in the hands of proprietors, either as sir or khudkasht. while 23.4 per cent. was held by occupancy tenants and 72.9 per cent. by tenants-at-will, these proportions being respectively the lowest and the highest in the district. Rents are paid mainly in kind, but the cash rentals average Rs. 5-1-5 for occupancy tenants, and Rs. 4-15-3 per acre for others; but it must be remembered that these figures refer only to the better and more stable areas. Nearly seven per cent, of the land is sublet, the shikmi rental being Rs. 4-11-6.

The results of successive assessments will be found in the appendix.* In 1898 a large enhancement of 45 per cent. was taken, in the expectation that the tract would rapidly recover from the deterioration which was already apparent. These hopes proved groundless, and the settlement would have broken down had not the land been chiefly held by large proprietors. The case of Barhapura was not so serious, however, as that of Afzalgarh, and few reductions in the revenue demand were necessary, since so much of the land is revenue-free. Nine villages were reassessed for a short period only, the original demand of Rs. 1,500 being reduced to Rs. 1,000 for a term of five years. The present incidence is the lowest in the district, being no more than Re. 1-4-4 per acre of cultivation.†

The pargana contains 221 villages, now divided into 270 mahuls, of which 116, with an area of 58,737 acres, are revenue free and form the property of the Raja of Kashipur. Of the remainder 79 are held in single, and 74 in joint zamındari tenure, and one is directly managed by Government. The Raja of Kashipur holds, in addition to his jagir, 13 villages and two mahals assessed at Rs. 6,301, this including the greater part of the old Pathan estate of Kot Qadir. Other proprietors include

^{*} Appendix, table IX. | † Appendix, table X.

Mir Al-i-Ali of Nagina, who has 12 villages and one mahal, the Pathans of Barhapura owning five villages, the Banias of Thakurdwara in Moradabad, the Chaudhris of Qasimpur Garhi in Afzalgarh, the Khattris of Najibabad, and the Banias of Nagina.

The population has exhibited marked changes during the past 50 years. In 1853 the number of inhabitants was only 19,188 and this rose to 26,894 in 1865, to 27,537 in 1872, and to 29,067 in 1881, while ten years later it was 34,814. A decline then set in, and at the last census the total was 28,626, of whom 13,400 were females. The former figure comprises 18,572 Hindus, 9,240 Musalmans, and 814 others, chiefly Christians and Aryas. The tract is purely agricultural, the only places of any size being Barhapura and Kot Qadir, which form the subject of separate articles. The village of Tanda Mahidaswala contains over two thousand inhabitants, but is a mere collection of small and scattered hamlets. Communications are poor, and are confined to the unmetalled roads from Barhapura to Nagina and Najibabad, from Nagına to Afzalgarh, from Hargampur to Kot Qadir and Kotdwara, and from Kot Qadir to Najibabad addition, there are numerous tracks through the forest, giving access to the submontane road, but all of these are rendered difficult by the numberless torrent beds which have to be crossed.

In former days the pargana was known as Islamabad, from a now deserted village between Nagina and Barhapura. At the cession of the district in 1801 it was amalgamated with Nagina, but once more became a separate subdivision in 1844. A further change occurred in 1866, when the narrow tract between the submontane road and the foot of the hills was transferred to Garhwal, the road itself following a few years later.

BASHTA, pargana Bashta, tahsil Bijnor.

The place which gives its name to the Bashta pargana is merely an agricultural village standing in 29° 4′ N. and 79° 13′ E., some two miles north of the Moradabad border, six miles south-west from Chandpur, and 25 miles from the district headquarters. Through it passes an unmetalled road from Chandpur to Azampur in Moradabad, and an inferior track

runs westwards from the village to a ferry over the Ganges leading to the Meerut district. The population has remained stationary for some years, and in 1901 numbered 1,757 persons, of whom 1,322 were Musalmans, the great majority being of the Julaha caste. Bashta possesses a police-station, a post-office, a cattle-pound, and an upper primary school. There is also an out-station of the American Mission from Bijnor. A small market is held here weekly, and an insignificant fair takes place in August, in honour of Zahir Diwan. The village lands are 276 acres in extent, about 180 acres being cultivated, and are held in various forms of tenure at a revenue of Rs. 316 by Banias, Kayasths, Sheikhs and Saiyids.

BASHTA pargana, tahsil BIJNOR.

This pargana occupies the south-west corner of the district, being bounded on the south by Moradabad, and on the west by the Ganges, which separates it from the Meerut district. To the north lies pargana Daranagar, and to the east Chandpur and Burhpur, the latter marching with Bashta for a few miles only in the south-east extremity. The area is liable to fluctuate from time to time with the variations in the course of the Ganges: the average for the five years ending in 1906 was 67,896 alres or 106 square miles.

The surface of the ground is uneven and diversified, but there are two main natural divisions, separated by the old high bank of the Ganges. The bangar or upland tract, however, is far from uniform. In the extreme south-east is a level block resembling pargana Chandpur, in which the soil is mainly loam, though much of it is of a very light variety, means of irrigation are fairly abundant, and no marked signs of deterioration are visible. Further west the soil degenerates, till in the frings of villages lying immediately above the first sharp descent into the Ganges valley it becomes almost pure sand: the homesteads are small, the population stationary, irrigation is but seldom obtainable, and the standard of husbandry is low. This tract terminates in a narrow valley with a rich and fertile soil, beyond which the land rises again and becomes mere sand on the crest of a second and steeper bank, below which hes the khadir of the

Ganges. The narrow valley apparently represents an ancient bed of the river, and others of a similar nature in the khadir to the west have resulted in the formation of a series of broad terraces on descenling levels. One of these channels is that immediately beneath the steep bank, and here the drainage water has collected into a long line of swamps, continuing southwards into Moradabad. It seems that some years ago this chain of morasses was far more extensive than at present; for in the beginning of the nineteenth century most of the khudir was an unbroken jungle, the haunt of tigers and wild elephants. A succession of dry seasons, however, permitted a large amount of reclamation, and the khadir became a fairly well tilled and populated tract. Its prosperity was checked by a very destructive flood in 1880, the effects of which were long felt, but the recovery was complete, when there came in 1894 the scare of a colossal inundation from the bursting of the Gohna lake in Garhwal and drove all the cultivators in panic from a country which at its best had but few attractions for them. Beyond the swampy belt the khadir rises slightly, but the surface is intersected by numerous channels and depressions; the soil is poor and often sandy, and in the extreme west, on the bank of the Ganges, almost the whole is uncultivated grass land and sandy wastes from north to south. As a whole, the khadir of Bashta is the poorest tract in the district, the climate is very malarious. the water is bad, and the inherent poverty of the soil is such that even the most favourable circumstances fail to make tillage a profitable undertaking. The rest of the pargana is little better, save for a small portion: altogether 61.5 per cent. of the soil is either bhur or bhur sawai, 29 per cent. is loam, and 9.5 per cent. clav.

When the pargana was first surveyed in 1836, the area under cultivation was 25,984 acres, and by 1865 the total had risen to 38,101 acres. This seems to have been almost the maximum, for from 1891 to 1900 the average was but 38,730 acres, the increase in thirty years being extremely small. There had been some extension in the interior, but in the khadir the figure had dropped from 15,777 to an average of 13,950 acres, and even this was much higher than that of the second half of the decade. There has since been some improvement, for in the five years

ending in 1906 the average cultivation for the entire pargana was 40,521 acres or 59.7 per cent. of the whole area, and this figure, though below that of the other parts of this tahsil, betokens a very fair state of development. The double-cropped area is, however, extremely small, averaging but 2,538 acres or 6.3 per cent. of the land cultivated, this being the lowest proportion in the district. Of the remainder, 5,866 acres are returned as barren, this amounting to 86 per cent. of the whole, and 21,489 acres or 31.6 per cent. as culturable, though both returns need qualification. In the case of the former no less than 2,858 acres are under water and 1,718 acres are occupied by roads, buildings and village sites, leaving only 1,541 acres as actually unculturable; while the latter includes 485 acres of groves, and 3,492 acres of new fallow, the great bulk being shown either as old fallow or culturable waste, though it is certain that much of this land, which lies mainly in the khadur or on the sandy banks, is of such a nature that it would never repay tillage. The irrigated area is small, averaging but 1,862 acres or 4.6 per cent. of the cultivation, and practically the whole of this is supplied from wells. These are mainly found in the south-east, where durable unprotected wells can be made and water is found at a short depth below the surface. The character of the cultivation is clearly illustrated by the nature of the crops grown. The kharif harvest averages 23,238 acres, as compared with 19,662 acres sown in the rubi, and the chief staples are bajra and arhar, together making up 358 per cent. of the area, urd, mung and moth, 22 per cent.; rice, 10.6 per cent.; sugarcane, 8.1 per cent.; and then come cotton, maize, and the inferior millets. The proportions for sugarcane and rice are lower and those of bajra and the pulses higher than in any other pargana of the district. In the rabi barley, either sown alone or in combination, occupies 54.5 per cent. of the sown area, and then comes wheat with 34.2 per cent., though the latter is more extensively proluced than in other parts of the tahsil. The remainder consists for the most part in gram, 6.1 per cent., and oilseeds.

By far the most prominent place among the cultivators of the pargana is taken by Jats, who outnumber all other castes; the remaining area is occupied principally by Chauhans, Ahirs,

Gujars and Chamars. In 1906 the total area included in holdings was 46,913 acres, and of this 11.6 per cent. was cultivated by proprietors, 288 per cent. by occupancy tenants, and 58.5 per cent. by tenants-at-will. Rents are paid mainly in kind and almost exclusively so in the more precarious tracts. The cash rates vary with the nature of the soil, and also with the caste of the cultivator, the Jats with their large holdings paying less than other classes. On an average occupancy tenants pay Rs. 3-11-1 per acre, this being the lowest rate in the district, and tenants-atwill Rs. 5-4-5, which is higher than one would expect. The area sublet is about 4 per cent. of the whole, and the shikmi rental averages Rs. 4-14-11 per acre. The revenue, as assessed at succossive settlements, is shown in the appendix. At the last revision in 1902-03 it was found necessary to make a reduction of nearly 4 per cent. on the expiring demand, and the present incidence is very low, being exceeded in all parganas save Barhapura.* The total sum payable is liable to vary, as 24 muhuls are on the alluvial register; they were last assessed in 1904 at Rs. 2,198. Forty mahals, too, in which the deterioration had been greatest, were assessed for five years only at Rs. 4,825.

The total number of mahuls into which the 156 villages are divided is now 294, and of these 119 are held in single, and 130 in joint samindura tenure, 19 are perfect, and 12 are imperfect pattidura, six are bharyuchara, and the remaining eight, with an area of 1,638 acres, are revenue-free. The chief proprietary classes are Tagas, Sheikhs and Banias, followed by Gujars, Saiyids, Jats and Chauhans. Nearly all have lost ground of late years, excepting the Banias, who have practically doubled their possessions since 1865. The leading proprietors are the Maulvis of Bachhraon in Moradabad, the Tagas of Tajpur, who together own 17 villages and seven mahals, and the Rani of Landhaura with 13 villages.

The population has exhibited repeated fluctuations at the various enumerations. The total fell from 29,422 in 1853 to 26,853 in 1865, but rose to 28,188 in 1872. The census of 1881 witnessed another decline, the number of inhabitants being 26,743, but ten years later it was 27,788. At the last census in 1901

^{*} Appendix, tables IX and X.

Bashta contained only 25,063 persons, of whom 11,628 were females, the number comprising 18,043 Hindus, 6,220 Musalmans, and 800 others, chiefly Christians and Aryas. There is no town in the pargana, and the only village with more than a thousand inhabitants is Bashta itself, which has been separately mentioned. This remote tract is ill provided with means of communication. The sole road is that from Chandpur to Bashta, whence rough tracks lead to the Ganges on the west and to Azampur in the Moradabad district.

The pargana was formerly known as Azampur. A few villages of the old Azampur muhal are now in Moradabad, but the area still coincides substantially with its representative of the sixteenth century. The northern portion, however, was included in Gandaur, part of which seems to have been assigned to Chandpur. In the early days of British rule the tract was known impartially as Azampui-Bashta and Gandaur-Bashta, but the union seems to have taken place before the cession in 1801.

BIJNOR, parguna and tahsil BIJNOR.

The headquarters town of the district stands in 29° 22′ N. and 78° 8′ E., at a height of about 780 feet above the level of the sea, and is built on slightly undulating ground, some three miles from the left bank of the Ganges, at a distance of 126 miles from Bareilly and 42 miles north-east from Meerut. It is connected by a metalled road with Nagina and the railway, and by similar roads with the Raoli and Jalalpur ferries over the Ganges, leading to Muzaffarnagar and Meerut respectively. Other roads, unmetalled beyond the municipal limits, lead to Mandawar, Chandok station and Nagal on the north, to Najibabad on the north-east, to Nihtaur and Dhampur on the east, to Moradabad on the south-east, and to Chandpur and Daranagar on the south.

The early history of the place is very obscure. Local tradition assigns its foundation to the mythical Raja Vena or Ben, of whom stories are told throughout Rohilkhand and in many other parts of the United Provinces. The local legend is to the effect that this monarch, who never taxed his subjects, raised part of the necessary revenue by the sale of fans (bijna) manufactured by himself, and that the place thus obtained its name. More

probably the word is a corruption of Vijayanagar or Bijanagar, though the derivation rests on pure conjecture. The present site is apparently of no great antiquity, but old remains are sometimes found about two miles to the west, near the Ganges. place has long been a stronghold of the Jats, and tradition states that for years warfare was waged between the Chaudhris of that race and the Musalman Kalals. The latter prevailed at length, and only one Jat woman escaped from the general slaughter. due time she bore a son, Dasanand Singh, who afterwards overthrew his enemies with the aid of the Musalman governor, Ali Jan, possibly the Ali Khan who held Sambhal in 1605. The Kalals were ejected, and since that time the Jats have flourished undisturbed. Bijnor gave its name to a mahal in Akbar's day, but was of no great importance, and did not rise to prominence till 1824, when it became the capital of the district in place of Nagina. Its subsequent history, which centres chiefly round the rebellion of 1857, has been recorded in the general account of the district.

At the first enumeration of 1847, the population of the town was 9,280, and since that time it has steadily increased. It rose in 1853 to 11,754, in 1865 to 12,566, in 1872 to 12,865, in 1881 to 15,147, and ten years later to 16,236. At the last census in 1901 the number of inhabitants was 17,583, of whom 8,380 were females. The total comprised 9,429 Musalmans, 7,778 Hindus, 202 Christians, 45 Jains, and 129 Aryas and Sikhs.

The town is fairly compact, and lies mainly between the Meerut and Muzaffarnagar roads. The principal bazar is known as Palmerganj, from the magistrate who designed it, and is a broad metalled thoroughfare traversing the centre of the site. The lesser streets are for the most part paved with brick and lined with masonry drains. The houses are chiefly of brick, except in the outskirts, but the town is singularly lacking in good buildings; there are a number of mosques and temples, but none of any archæological or architectural merit; several fine old wells, however, are in existence, and four of them, known as the Shirin, Kham, Pattharwala and Hajjaman, are believed to be about three hundred years old. The area is divided into eleven muhallas or quarters, named generally after the classes which inhabit them. Such are the Chaudhriyan, Jatan, Khattriyan, Brahmanan,

Acharjan, Rangaran and Mirdhagan muhullus, while the others are the Chah Shirin, from the well already mentioned; the Bazar Shamba or Saturday market; Qazipara, the residence of the Qazis; and Bullerganj, named after a former collector of the district.

The civil station lies to the north of the town. It is small, but picturesque, and is fringed by good groves and gardens. There neither is nor ever has been a cantonment, this being one of the few stations that were not garrisoned in early days. Between the civil station and town stand the district courts and offices, built in 1849 and enlarged in 1877; and hard by are the judge's session house, the district jail, and the central post-office. Other public institutions of Bijnor include the dispensary, the tahsil and registration offices, the police-station, a Government sarai, and a dak bungalow in the civil lines. The educational establishments are numerous. The high school and the middle vernacular tahsili school are maintained by the district board, as also is a primary school for girls. The municipality supports an upper primary school, and aids nine small schools in the town, one of these being for girls. The American mission, which has a station here, possesses an Anglo-vernacular school for girls, which has had a fairly successful career.

Bijnor is not a great trade centre, but a fair amount of business is done in the markets of Palmerganj and Chah Shirin, though the place cannot compare with Nagma or Najibabad. The manufactures are inconsiderable, and the only specialities of the town are knives and cutlery, made in the suburb of Bukhara, to the east, and the *janeos* or sacred threads worn by Brahmans and Chhattris, which are exported to many parts of the provinces.

The local affairs are administered by a municipal board, which has been in existence under various forms since 1866. The board consists of twelve members, of whom nine are elected, and three, including the district magistrate, are appointed by Government. The income is derived principally from an octroi tax on imports, and is supplemented by conservancy receipts, rents of Government property and houses, and a tax on weighmen. Details of the income and expenditure under the main heads for each year since 1891 will be found in the appendix.*

^{*} Appendix, table XVI,

The sanitary arrangements are gool, and the health of the place is usually excellent, though it is subject to occasional epidemics of cholera.

BIJNOR pargana, tahsil Bijnor.

The pargana which derives its name from the headquarters town of the district is an irregularly shaped tract, extending inland from the Ganges to the boundaries of Nagina and Nihtaur parganas, and marching on the north with Mandawar, Kiratpur, and Akbarabad, and the south with Daranagar. Its area is liable to change owing to the action of the Ganges, which affects the alluvial lands on its banks: during the five years ending in 1906 it averaged 69,609 acres or 108.7 square miles.

Through the north-west of the pargana flows the Malin, a river of considerable size which closely follows the Mandawar boundary. The valley of this stram is a rich tract of fertile loam and clay deposited in the course of many centuries; it is a continuation of the Rawapuri tract of Mandawar and Kiratpur, so named from the Rawa cultivators who have done so much to bring it to its present pitch of excellence. There is no need of irrigation owing to the natural moisture of the soil, which produces abundant harvests of all the more valuable staples. The river has cut for itself a deep and wide bed, in which the channel wanders from side to side, seldom doing any injury to the fields above the flood bank. Near its junction with the Ganges it unites with the khadir of the latter river, which consists of a belt of level ground, but slightly inferior to the Malin valley. The whole tract is well populated, amply protected from drought, and in a flourishing condition of stable tillage. This klouder terminates on the west in a flood bank of sufficient height to obviate the danger of inundation, and below this is a narrow strip of a purely alluvial nature, going by the name of belit, as in Moradabad and Budaun to the south. Here there is practically no cultivation, sterile sand alternating with marsh, and producing nothing but coarse grass and tamarisk, which provide shelter to numerous and destructive wild animals.

Above the Ganges khadir and the Malin valley the land rises inland to a sandy plateau, divided into two portions by

the Chhoiva, a small drainage channel which crosses the centre of the pargana from north to south and then forms for several miles the Daranagar boundary. The soil on the two ridges is generally poor and unfertile, especially on the slopes, where long periods of fallow are necessary. In places sandhills have been formed by the action of the wind, and on the edges of the plateaux the ground is scored by ravines; but apart from these, the tract is extensively cultivated, and the soil has been improved into a fair loam by continuous tillage, while in the depressions it becomes a stiff kind of clay, capable of bearing rice. But the population is scanty, and irrigation is unknown, so that the crops have to depend solely on the rains and are for the most part of inferior quality. This upland tract sinks towards the east into a level expanse of firm loam and clay, gently sloping from north to south, and traversed along its eastern border by one of the main channels of the Ban, sometimes distinguished by the name of Banra. This stream has a well-defined bed, but in wet years it overflows its banks, flooding the fields in its neighbourhood. The eastern tract is both populous and well cultivated, producing excellent crops of cane, rice and wheat, and comparatively secure against drought, owing to the ease with which wells can be constructed when necessary. There are several small tanks which can be utilised for the same purpose, but no lakes or ghils of any size.

Of the whole pargana 52 per cent. has a loam soil, 10 per cent. clay, 20 5 per cent. bhur, while the rest is the light loam classed as bhur sawar. Under such conditions the standard of development is remarkably high. As early as the ninth settlement no less than 54,250 acres were under cultivation, and the subsequent increase has been but small. The average for the five years ending in 1906 was 48,773 acres or 70.2 per cent. of the whole, while 6,479 acres or 13.3 per cent. of the cultivation bore a double crop. Of the remaining area 12,214 acres or 176 per cent. are shown as culturable, this including 1,094 acres of groves, 5,914 acres of new fallow or land prepared for sugarcane, and 5,206 acres of old fallow and available waste; and 8,522 acres or 12.2 per cent. as barren, though under this head come 2,942 acres under water and 3,691 acres occupied by sites, roads, and the like,

leaving but 1,839 acres of unculturable land, such as sandhills and the sterile belt of the Ganges. The figures for irrigation are negligible, the average being only 202 acres, mainly watered from wells, which are reserved for garden crops. Much more could be irrigated if necessary, but as a rule the lowlands have sufficient moisture, while in the sandy uplands the means are absent.

The crop statement shows that on an average 32,379 acres are cultivate I for the kharif harvest an I 22,683 acres for the rabi. In the former bayra and arhar take the lead, constituting 334 per cent. of the area, this high proportion resulting from the nature of the soil in so large a part of the pargana. Rice covers 25.7 per cent., and is confined to the lower levels, though there has been a marked increase in the cultivation of this crop during recent years. Sugarcane, on the other hand, has remained stationary with 15.6 per cent., and cotton, 42 per cent, exhibits a decline. The rest consists in wid, mung and moth, grown in the lighter soils, juar, cut when green for fodder, and the coarser millets. In the rabi the foremost place is taken by barley, which, when sown alone and in combination with other crops, comprises 56.4 per cent. of the total area. Wheat has improved its position and now averages 25 5, and then follows gram with 15.4 per cent., the remaining products being of very little importance.

More than half the area is cultivated by Jats, who are agriculturists of a high order, and after them come Sheikhs, Sainis, Rawas, Chamars and Tagas. The Rawas are the best of all, but are not very numerous, being confined mainly to the neighbourhood of the Malin. The total area included in holdings in 1906 was 55,276 acres, and of this no less than 20 per cent. was proprietary cultivation, the proportion of sir or khudkusht being the highest in the district, occupancy tenants hold 30 per cent., and tenants at-will 47.4 per cent, the remainder being chiefly in the hands of ex-proprietors. Rents are chiefly paid in cash, though the grain-rented area is still considerable. The rates are very high in the Malin valley, but on the sandy uplands they are distinctly low, the present averages for the entire pargana being Rs. 4-12-4 per acre in the case of occupancy tenants and Rs. 6-2-11 for tenants-at-will. Some 4.3 per cent, of the land is

sublet, the *shikmi* rental averaging Rs. 6-15-3. The revenue demand at successive settlements will be found in the appendix. The last revision gave an enhancement of 31 per cent. on the expiring demand, and the present incidence is somewhat above the general average for the district.* No fewer than 51 mahals are on the alluvial register, and the changes in this area have necessitated frequent revisions, the last having taken place in 1906, when the revenue was Rs 3,706.

The pargana contains 229 villages, at present divided into 567 mahals, of which 254 are joint zamindari, 159 are owned by single proprietors, 70 are bharyachara, 57 are imperfect pattidari, and 27 are held in the perfect form of the same tenure. The bulk of the area is owned by village communities, the principal proprietary castes being Jats, Sheikhs, Brahmans, Banias, Khattris, Saiyids and Rawas. Few of the larger landowners of the district have any property in the pargana, the principal exceptions being the Chauhans of Haldaur, the Rani of Landhaura, and the Bishnois of Muhammadpur. The most prominent cultivating and proprietary bodies are the Jats of Bijnor, Adampur, Suaheri and Mirzapur Ganesh; the Sheikhs of Bijnor and Umri, the Rawas of Gajraula, the Brahmans of Bijnor, and the Saiyids of Pedi.

The population of the pargana in 1853 numbered 50,863 souls. The total fell to 47,603 in 1865, but rose again to 51,790 in 1872; at the census of 1881 it had dropped to 49,966, but ten years later it rose once more to 53,108. At the last enumeration in 1901 the number of inhabitants was 55,077, of whom 26,078 were females. Classified according to religions, there were 34,588 Hindus, 19,705 Musalmans, and 784 others, chiefly Christians and Aryas, with a few Jains and Sikhs. Apart from the town of Bijnor the tract is purely agricultural, the villages are generally small: Suaheri, Umri, and Gajraula alone containing more than a thousand inhabitants. Although lying off the railway, the pargana has good means of communication, including the three metalled roads leading from Bijner to Nagina, Muzaffarnagar and Meerut. The chief unmetalled roads are those connecting the headquarters with Moradabad, Dhampur, Chandpur and Najibabad.

^{*} Appendix, tables IX and X.

It is not known when the pargana was first formed, but at all events it was in existence in the days of Akbar. The area was then probably greater than at present, for it is said that in the days of Muhamma I Shah a considerable portion was a lded from Bijnor to Jhalu by a Jat named Rao Jit Singh. Part of this was re-tored in 1844 on the abolition of the old pargana of Jhalu, and since that time no changes have occurred.

BIJNOR tuhsil.

The tahsil of Bijnor has been in existence since the intro luction of British rule, but it only assumed its present shape when the old Chandpur tahsil was abolished and the parganas of Bashta and Chanlpur were added to the three parganas of Bijnor, Mandawar and Daranagar, which formerly composed the subdivision. As at present constituted, the tahsil includes a long and somewhat narrow strip of country lying along the Ganges, this river separating it on the north and west from the districts of Muzaffarnagar and Meaut. To the south lics the Amroha tahsil of Moradabad, and to the east are the Najibabad and Dhampur tahsils of this district. The total area is liable to change from year to year, by reason of the action of the Ganges, the channel of which undergoes remarkable changes as the stream sways from side to side in the broad and sandy bed. The extent to which such action takes place may be estimated from the fact that between 1865 and 1895 land assessed at Rs. 15,992 was diluviated, while the revenue imposed on alluvial accretions elsewhere amounted to Rs. 8,544 during the same period. The average area of the tahsil for the five years ending in 1906 was 310,542 acres or 485.2 square miles.

The physical aspects of the component parganas have been dealt with at length in the several articles. Generally speaking, the country is divided into three main tracts, comprising the low *khadir* of the Ganges, broad in the north and south, narrow in the centre, and everywhere more or less precarious; the high sandy uplands, in which the villages are small and scattered, the population scanty, means of irrigation deficient, and the quality of the crops inferior; and beyond this the high

level, broken only by the valleys of the Malin and Chhoiya, sinks gradually to the rich loam and clay soils of the central uplands, terminating in the basin of the Ban, which for some distance forms the eastern boundary.

The tahsil is fairly accessible by road, but it suffers from the lack of railway communication. The main line of the Oudh and Rohilkhand system traverses the extreme north of pargana Mandawar, with stations at Chandok and Balawali, the latter standing close to the great bridge over the Ganges; but the nearest station to Bijnor is that of Nagina, connected with the district headquarters by a metalled road 22 miles in length. Similar roads lead from Bijnor to Muzaffarnagar and Meetut, crossing the Ganges at Raoli and Jalalpur respectively, the passage being effected by a bridge of boats in each case, replaced during the rains by ferries. There are several other crossings, of which the most important are the ferries at Daranagar and Jafarabad: a complete list of the ferries, and also of the roads, will be found in the appendix. The principal unmetalled roads comprise those running from Bijnor to Mandawar and Chandok on the north, to Kiratpur and Najibabad on the north-east, to Nihtaur and Dhampur on the east, to Nurpur and Moradabad on the south-east, to Chandpur and Amroha, and to Daranagar on the south. Several other roads radiate from Chandpur, leading to Haldaur, Nihtaur, Nurpur, Dhanaura, Bashta, and Jafarabad ferry; while those from Daranagar to Nihtaur, and from Raoli to Mandawar and Kiratpur practically complete the list.

For administrative purposes the tahsil forms a subdivision in the charge of a full-powered officer on the district staff. There is a tahsildar with headquarters at Bijnor, and the remaining magisterial courts are those of the Bijnor municipal bench, of Chaudhri Budh Singh at Chandpur, and of Raja Sham Singh of Tajpur, whose jurisdiction includes the Chandpur and Bashta parganas. The chief civil court is that of the munsif of Bijnor, while a number of village munsifs have been appointed for the trial of petty cases in the rural tracts of the Bijnor, Mandawar and Daranagar parganas. For police purposes there are at present stations at the capitals of each pargana excepting Daranagar, which is divided into the two circles of Ganj and Amheia. Part of the Chandpur circle

extends into pargana Burhpur, but otherwise the boundaries are conterminous with those of the tahsil and the various parganas. This arrangement will be modified in the near future by the abolition of the Ganj and Bashta thanas, the former being amalgamated with Bijnor and the latter divided between Chandpur and Amhera, the headquarters of which will probably be removed to Haldaur. The post-offices, markets, fairs, and schools of the tahsil will be found in the appendix.

The subdivision contains the municipalities of Bijnor and Chandpur, the Act XX towns of Mandawar, Daranagar and Jhalu, and a number of large villages, such as Bashta, Haldaur. Baldia, and Jahanabad, which form the subject of separate articles, as well as several others mentioned in the accounts of the different parganas. The alteration in the area of Chandpur makes it impossible to ascertain the population of the tahsil at early enumerations, but in 1891 it amounted to 200,039 souls. This rose in ten years to 203,972, of whom 96,928 were females. Hindus numbered 135,578, Musalmans 64,482, and of the rest 2,469 were Aryas, 807 Christians, 529 Sikhs, and 107 Jains. The most numerous castes are Chamars, 31,731; Jats, 28,229; Rajputs, 10,278, of whom 8,110 were Chauhans, the rest being principally Gahlots and Tomars; Brahmans 8,847; Sainis 8,230; and Banias 5,190. Next come Kahars, Barhais, Koris, Gadariyas and Rawas, the last being cultivators of the best stamp and chiefly residing in the north. Among the Musalmans the lead is taken by Sheikhs, numbering 18,432; and then come Julahas, 10,064: Telis 3,870; Behnas 3,067; Jhojhas 3,037; Pathans, Saivids and Hajjams. The tahsil is mainly agricultural, like the rest of the district, 50.7 per cent. of the people being directly dependent on cultivation, while a further considerable proportion comes under the head of partially agriculturist. Seven per cent. is included in general labour, eight per cent. in the manufacture of textile fabrics, six per cent. in the supply of food and drink, and more than four per cent. in pasture and cattle-breeding.

BUNDKI, pargana and tahsil NAGINA.

A small village in the north of the pargana, standing in 29° 31' N. and 78° 24' E., on the road leading from Nagina to

Najibabad, about seven miles north from the tahsil headquarters. The village itself is small and unimportant, having at the last census a population of only 180 persons, including 63 Musalmans: it has an area of 207 acres, and is held at a revenue of Rs. 450 by Chauhans in joint zamindari tenure. The place deserves mention merely as possessing a railway station, from which a feeder road leads eastwards to the adjoining large village of Hargampur on the road from Nagina to Kot Qadir and Kotdwara. Hargampur had a population in 1901 of 1,617 persons, and possesses an upper primary school and a bazar in which markets are held weekly.

BURHPUR pargana, tahul DHAMPUR.

This pargana forms the south-western portion of the tahsil, being bounded on the east by Seohara, on the north by Dhampur and Nihtaur, on the west by Chandpur and Bashta, and on the south by the Moradabad district. It is of comparatively recent origin, having first come into existence in 1844; but at that time the western boundary was the Ban river, and the addition of the extensive tract to the west of that stream was not made till fifty years later. As at present constituted, it has a total area of 85,858 acres or 134 square miles.

Besides the Ban, which divides the pargana into two almost equal halves, there are several other streams included in the drainage system of the tract. The Ban itself is fed by the Banra, an insignificant rivulet which in the dry weather is a mere string of pools and drains the northern portion of the western half. East of the Ban flows the Gangan, at first taking a parallel course and then bending south-eastwards to the pargana boundary, thereafter separating Burhpur from Seohara. Further north this function is performed by the Karula, another perennial river, though much smaller than the Gangan. All these have welldefined beds, and seldom do any damage by inundation; but in its lower reaches the Gangan is frequently employed for irrigation purposes. None of the rivers has any khadir, and the whole pargana is a level plain, its uniformity being only broken by the constant appearance of sand ridges. The latter are visible almost everywhere, but are most prominent along the watershed between the Ban and Gangan. Their presence greatly affects the fertility

of the tract, and renders irrigation almost impossible. The northeast corner, however, between the Gangan and Karula, is of a superior nature: here little sand is to be seen, and the rich soil is rendered more productive by the presence of the Nihtaur canal and its distributaries. There is a second good circle in the southwest, in which earthen wells are numerous and remarkably durable; but the rest of the pargana is poor and light, with inadequate means of irrigation and several patches of scrub and dhak jungle, generally in the vicinity of the Ban. Of the whole area some 55 per cent. possesses a loam soil and 20 per cent. is clay, the remainder being either bhur or the sandy loam known as bhur sawar.

The pargana has greatly improved of late years, the increase of cultivation between the tenth and eleventh settlements amounting to 23 per cent., the chief causes being the rise in population, rents and prices and the development of the tract by the advent of the railway. For the five years ending in 1906, the average cultivated area was 65,396 acres or no less than 762 per cent. of the whole, this proportion being exceeded in Chandpur alone. double-cropped area is, however, small, averaging but 10 7 per cent. of the cultivation. The remainder is shown either as barren, 5.676 acres or 66 per cent. or as culturable waste, 14,733 acres or 17.2 per cent. The former is reduced to 161 acres only, if the 2,581 acres under water and the 2,987 acres occupied by village sites. buildings and roads be excluded; while of the latter 1,282 acres are under groves, and 7,248 current or recent fallow. probably room for some further extension of tillage, though much of the available land is so poor that it would hardly repay cultivation. The proportion of irrigation is, on an average, 16.8 per cent. or higher than in any other pargana of the district: not only do the canals supply 3,617 acres, but no less than 6,517 acres are watered from wells, while the tanks and streams also are frequently utilised. Of the two main harvests the kharif covers 43,806, and the rabi 28,380 acres. The chief staples of the former are rice, 38.5 per cent., and sugarcane, 17.1 per cent., while the rest consists for the most part in bujra and arhar, grown in the lighter soils and together making up 15 per cent. of the area sown; cotton, 6.8 per cent., urd, mung, moth, and the coarser

millets. Wheat and barley constitute the chief rabi crops; the former, when sown by itself, averaging 40.6 per cent. of the harvest, and the latter, whether alone or in combination, 38 per cent. An additional 15 per cent. is contributed by gram, no other crop being of any importance.

The tenantry of the pargana consist principally of Jats, Chauhans, Ahirs, Gujars, Tagas, Brahmans and Chamars. The total area included in holdings in 1906 was 72,800 acres, and of this 18 per cent. was cultivated by proprietors, 44·3 per cent. by occupancy tenants, and 36·5 per cent. by tenants-at-will. The rents are paid almost wholly in cash, and vary chiefly according to the status of the cultivators and the quality of the land, little attention being paid to caste. On an average occupancy tenants pay Rs. 5-4-0 and tenants-at-will Rs. 8 per acre. The latter rate prevails also in the case of shikmi tenants, who hold 4·6 per cent. of the land.

A table in the appendix shows the revenue demand at successive settlements, but unfortunately the figures are merely those for the pargana prior to its reconstitution in 1891, when a large area was added from Chandpur. At the last revision in 1902 an enhancement of nearly 30 per cent. was taken, owing to the general improvement resulting from the opening of the railway, the extension of cultivation, and the rise in prices and rents. The incidence is still, however, very low, as compared with that of the district in general, and is far less than in other parts of the tahsil.* At the present time the pargana contains 203 villages divided into 519 muhals, of which 59, with an area of 10,698 acres, are revenue-free, the greater part of these grants dating from a period anterior to British rule. Of the remainder 140 are single, and 202 joint zamindari, 59 are bhavyachara, 43 imperfect, and 16 perfect pattiduri.

The proprietors are chiefly Tagas, Chauhaus, Saiyids, Sheikhs and Banias, the last having added to their estates considerably during recent years. The Musalmans and some of the bhavyachara Tagas are losing ground, but the rest are for the most part in prosperous circumstances. The largest landowners are the Tagas of Tajpur, who together own 30 villages and ten

^{*} Appendix, tables IX and X.

mahals, while next comes Chaudhri Ranjit Singh of Sherkot. The Chauhans of Siau have a fair estate, and also hold land in-Chandpur and Bashta.

The population of the old pargana numbered 32,806 persons in 1853, and after falling to 31,422 in 1865, rose to 35,225 in 1872, and to 35,404 in 1881, while ten years later it was 39,200. The number of inhabitants of the present area in 1891 was 72,033, while at the last census it had increased to 76,308, of whom 36,427 were females. The total included 56,340 Hindus, 19,155 Musalmans, and 813 others, chiefly Aryas and Christians. The chief places in the pargana are Tajpur, Nurpur and Pheona, which have been separately described, while there are several other large villages, such as Morna, Gohawar and Asgharipur, which contain large agricultural communities. Means of communication are confined to unmetalled roads, of which a number radiate from Nurpur, including that from Bijnor to Moradabad, and those leading to Chandpur, Dhanaura, Seohara, Dhampur and Nihtaur.

The pargana apparently takes its name from the small and now unhabited village of Burhpur, but it it seems almost certain that the name was originally intended to be Nurpur, and that the present appellation is due solely to a mistake in writing. Nurpur was certainly the most important place when the pargana was first formed, although it has since been supplanted by Tajpur.

CHANDOK, pargana Kiratpur, tahsil Najibabad.

An agricultural village in the north-west portion of the pargana, standing in 29° 36′ N. and 78° 10′ E., on the high sandy uplands between the Malin and Ganges, at a distance of five miles from Nagal by the road from that place to Mandawar, ten miles east from Najibabad, and 17 miles from the district head-quarters. It deserves notice as giving its name to a station on the Oudh and Rohilkhand Railway, though this is actually situated in Daulatpur of pargana Mandawar, an adjoining village on the south. Otherwise the place is unimportant. At the last census Chandok contained 463 inhabitants, principally Jats and Chamars; it has an area of 1,022 acres, cf which some 710 acres are cultivated, and is assessed at Rs. 1,100, the owners being Jats and Brahmans holding in joint zamindari tenure.

CHANDPUR, pargana CHANDPUR, tahsil BIJNOR.

The capital of the Chandpur pargana is a considerable town situated in 29° 8′ N. and 78° 16′ E., at a distance of 21 miles south-south-east from Bijnor, with which it is connected by an unmetalled road. Several other roads meet at this point, leading from Haldaur on the north, Nihtaur on the north-east, Nurpur on the east, Amroha on the south-east, Dhanaura on the south, Bashta on the south-west, and to Jafarabad ferry over the Ganges on the west.

Little is known of the early history of Chandpur, but it is said to have been a flourishing town as early as the days of Akbar, when it was the capital of a pargana and a dastur in the sarkar of Sambhal. In the early days of British rule it was made the headquarters of a tahsil, and so remained till the reconstitution of the subdivisions in 1894; the old tahsil buildings are of the fortified pattern adopted in former days, and are still standing on the eastern outskirts of the town. Chandpur was occupied by the Pindaris in 1805, and again by the Musalman rebels in 1857, though on neither occasions was much damage done.

The population at the first census of 1847 numbered 11,491 souls, and has since remained more or less stationary. The total rose to 12,748 in 1853, but by 1865 had dropped to 11,286; it again rose in 1872 to 12,033, but fell in 1881 to 11,182. Ten years later it was 12,256, while at the last census in 1901 the number of inhabitants was 12,586, of whom 6,496 were females. Classified according to religions, there were 3,519 Hindus, 8,930 Musalmans, 17 Jains, 15 Christians, and 105 Aryas and Sikhs.

The town is of irregular shape, being built on slightly undulating ground at an elevation of 740 feet above the level of the sea and is surrounded by a number of small ponds and depressions. On the north and east is a large excavation known as the Satara, while another similar tank, known as the Chimman Tal, receives the drainage of the west and south of the town. During the rains, when these become filled with water, the latter overflows into the Satara, which drains eastwards through a cutting upon some lowlying ground. On an island in the Satara stands the quarter known as the Bhangitola. In 1868 Chandpur was

described as the filthiest place in the province, but a very great improvement has lately been effected, and the town with its well paved and drained streets presents a thriving appearance. The sanitary condition of the place is generally good, and epidemic diseases are uncommon.

There are few old buildings in Chandpur, the chief exceptions being a handsome mosque and a tomb, both of considerable antiquity, in the quarter known as Sarai Sheikh Habib. bazar or main street is a metalled and narrow thoroughfare. and the other streets, though mostly metalled or paved, are insignificant. Markets are held twice a week, and a considerable trade is carried on, principally in grain, unrefined sugar, cattle, oilseeds and tobacco. The only special manufactures of the place are earthenware pipe-bowls, and water bottles, as well as the coarse cotton cloths known as garha and chauthai; the latter is a strong closely woven fabric, generally of undyed yarn. but sometimes with a red warp stripe down one side and red weft stripes at intervals of a yard or so; the price ranges from eight to ten annas per yard. The public buildings include a police-station, a post-office, a branch dispensary and a cattle-The educational institutions include a large middle vernacular school, three primary schools aided by the municipality, and some small schools for boys and girls belonging to the American Mission.

Chandpur has been administered as a municipality since 1866, and its affairs are managed by a board of twelve members, of whom nine are elected and the rest appointed by Government. There are three sub-committees for the management of the octroi and for the supervision of public works and conservancy. The income is derived principally from the octroi tax on imports, while small sums are realised from the cattle-pound and the sale of manure. Details of the receipts and expenditure under the main heads for each year since 1891 will be found in the appendix.* The chief resident of Chandpur is Chaudhri Budh Singh, who is an honorary magistrate of the third class with jurisdiction within municipal limits.

^{*}Appendix, table XVI.

CHANDPUR pargana, tahsil BIJNOR.

This pargana represents but a fraction of the area known as Chandpur prior to 1894, when the abolition of the tahsil of that name led to a fresh distribution of parganas and to a rectification of the boundary by the assignment of the eastern half to Burhpur. It is now a small and compact tract, bounded on the west and south by Bashta, on the east by Burhpur, and on the north by Daranagar, the total area being 43,672 acres or 68 square miles.

In its physical aspects Chandpur presents a very homogeneous aspect. Practically the whole area belonging to the bangar or upland plateau: one or two villages on the western border dip slightly towards the upper khadir of pargana Bashta; but apart from these, the country is a level plain with a light soil, rising occasionally into ridges of sand, especially in the north and north-west, which are distinctly inferior to the southern portion, and particularly to the rich suburban cultivation seen around the town of Chandpur. There are no rivers or streams, the drainage following the general slope of the country from north to south, and either finding its way into the lower levels of the khadir or else into the Ban and its tributary the Banra. Irrigation is scarce in the north, but in other parts wells can be constructed without difficulty: they are usually unprotected, and many of them last for years. The soil classification of the recent settlement shows that 38.5 per cent. of the area is loam, 56 per cent. sandy bhur or bhur sawai, and the remainder clay. prevalence of sand, coupled with the inadequacy of protection against drought, is the weak point of the pargana, which otherwise is strengthened by a numerous population of highly skilled cultivators.

It is not possible to ascertain accurately the state of development which Chandpur had attained in early years, owing to the alterations in the area, but it is known that considerable progress was effected between 1835 and 1865. From 1891 to 1900 the average area under the plough was 34,080 acres, and for the five years ending in 1906 the corresponding figure was 33,473 acres or 76.6 per cent. of the whole, the proportion being the highest in any pargana of the district. On the other hand,

as in Bashta, the double-cropped area is very small, averaging but 7·1 per cent. of the net cultivation. The remainder of the pargana comprises 7,940 acres classed as culturable and 2,258 acres of barren land, the latter constituting but 5·2 per cent. of the whole. The actually unculturable area is extremely minute, for no less than 1,589 acres are occupied by sites, buildings and roads, and 572 acres are under water. Deductions must also be made from the so-called culturable area, since 850 acres are covered with groves, which are unusually abundant, and 4,644 acres are either recent fallow or prepared for sugarcane, so that very little land is available for further extension of tillage.

The crops closely resemble those found in the rest of the tahsil. The kharif harvest averages 20,966 acres, largely exceeding the rabi total of 14,808 acres. The foremost place is taken by bajra and arhar mixed, which constitute 31.8 per cent. of the area sown, and then come the pulses, urd, mung and moth. with 21.4 per cent. sugarcane with 15.2, and rice with 12.6 per cent. The rest consists in cotton, maize, the smaller millets, and juar grown for fodder. In the rabi barley, either sown alone or in combination with wheat or gram, under the names of guja i and bejhar, covers 56.7 per cent. of the land cultivated for this harvest, and next follow wheat with 28.2, and gram with 10.7 per cent., the miscellaneous crops being quite unimportant. more valuable staples have made a considerable advance of late years, but in the sandy upland country it is inevitable that a very large area should be cropped with the inferior classes of food-The irrigated land, as already mentioned, lies mainly in the south and round the town of Chandpur. The average area watered is 1,466 acres, and almost the whole of this is supplied by unprotected wells, the number of which could be largely increased when necessary.

The cultivators of the pargana belong to much the same classes as those found in Bashta, Jats largely preponderating, and after them come Chauhans, Ahirs, Sheikhs and Brahmans. The area included in holdings in 1906 was 38,667 acres, and of this as much as 18.4 per cent. was proprietary cultivation, either sir or khudkasht, while occupancy tenants held 42.3, and

tenants-at-will 37·1 per cent. Rents vary according to caste, Brahmans and Ahirs paying low rates, while the rental for Jats, whose holdings are generally large, is but moderate. On an average occupancy tenants pay Rs. 4-7-0 per acre, and tenants-at-will Rs. 6-8-7, the latter being distinctly high for a tract of this description. About 4·5 per cent. of the area is sublet, shikmis paying as much as Rs. 7-8-8 per acre. The variations in the revenue demand since the beginning of the 19th century will be found in the appendix, but all the figures prior to the last settlement are those for the original pargana of Chandpur, before the transfer of a large portion to Burhpur. At the revision in 1902-03 an enhancement of some 14 per cent. was taken, though the incidence is well below the general average for the district.*

As at present constituted, the pargana contains 128 villages, divided into 284 mahals. Of the latter 83 are single, and 121 joint zamindari, 28 are bhavyachara, 31 are held in imperfect pattidari, and 16 in the perfect variety of the same tenure, while the remaining five, with an area of 1,437 acres, are revenue-free. The proprietors are mainly Tagas, Chauhans and Sheikhs, while Banias, Saiyids and Jats hold a considerable proportion. The smaller communities have lost much ground of late years, mainly to the advantage of Banias; but the number of these proprietary village communities is still a striking feature There are but few large landlords, and most of the pargana. of these are non-resident. The chief are Chaudhri Ranjit Singh of Sherkot, the Tagas of Tajpur, and the Gujar Rani of Landhaura.

The population of the pargana numbered 65,472 persons in 1853, and though this dropped in 1865 to 59,616, it rose to 65,770 in 1872. A further decline was observed in 1881, when the total was 61,532, but ten years later it was no less than 71,187. These figures, however, are for the old pargana, and consequently valueless for the purpose of comparison. The number of inhabitants in the existing tract in 1891 was 38,363, while at the last census it had risen to 41,787, of whom 20,246 were females. Classified by religions, there were 24,128 Hindus, 17,254

[·] Appendix, tables IX and X.

Musalmans and 405 others, chiefly Christians. The only town is Chandpur itself, but besides this there are the large villages of Siau and Sisauna, while three others contain more than a thousand inhabitants. Though possessing neither railway nor metalled road, the tract is fairly well provided with means of communication, unmetalled roads radiating from Chandpur in all directions. They lead to Bijnor on the north-west, Haldaur on the north, Nihtaur on the north-east, Nurpur on the east, Amroha on the south-east, Dhanaura on the south, Bashta on the south-west, and the Jafarabad ferry over the Ganges on the west.

Chandpur was known as a pargana in the days of Akbar, but its area was then much larger, as it included almost all the modern Burhpur. The latter was first formed in 1844; but did not assume its present shape till 1894, when a further large deduction was made from the area of this pargana.

DARANAGAR, pargana DARANAGAR, tuhsil Bijnor.

The capital of the pargana is a small town standing in 29° 17' N. and 78° 7' E., on the high left bank of the Ganges, six miles south from the district headquarters. It is connected with Bijnor by an unmetalled road, and a second runs due east to Haldaur and Nihtaur, while a third goes to Jhal on the road from Bijnor to Chandpur. There are two distinct sites, the village of Daranagar proper being to the north, while that of Ganj cr Erskineganj, so called after a former collector of the district, by whom it was founded, lies about half mile to the south. In Ganj there is a police-station, as well as a post-office and a cattlepound; and this quarter also contains the bazar, where markets are held twice a week. In addition, there is an upp r primary school and two aided schools. Daranaga: is no, of for the bathing fairs that take place after the opening of the rains and in the cold weather. The largest is that in the month of Kartik, when the moon is full, and is attended by some 25,000 persons; the meeting lasts for four or five days, and provides an occasion for much trade, dealers coming from all the surrounding districts. The other gathering is held in honour of Zahir Diwan, and is much smaller, it is attended by people of the lower classes, both Hindus and Musalmans, who meet in an open place where

the banners are set up and the usual mixture of traffic and worship occurs.

The population of Daranagar, including that of Ganj, numbered 3,632 persons in 1881, but has since declined, the total dropping to 3,163 in 1891, while at the last census it was 3,075, of whom 1,322 were Musalmans. The area of the revenue mauza is 3.011 acres, but a large amount of this consists of sandy waste below the high bank, and only 932 acres are cultivated. The proprietors are Brahmans, Banias and the Rani of Landhaura, and the revenue is Rs. 1,081. The actual site has been administered under Act XX of 1856 since 1865. The number of houses in the town in 1906 was 865, of which 403 were assessed at taxation; the income from the house-tax for that and the two preceding years averaged Rs. 618, giving an incidence of Re. 1-5-4 per assessed house and Re. 0-3-5 per head of population. The total income was Rs. 1,008, including the initial balance, as well as the tolls collected at the fair; and the expenditure averaged Rs. 952, of which Rs. 402 were devoted to the maintenance of the town police, Rs. 204 to the upkeep of a conservancy staff, and Rs. 93 to local improvements.

DARANAGAR pargana, tahsil Bijnor.

Daranagar is the central pargana of the tahsıl, lying between Chandpur and Bashta to the south and pargana Bijnor to the north. It extends inland from the Ganges, beyond which are the districts of Muzaffarnagar and Meerut, to the confines of Nihtaur, the boundary roughly following the course of the Ban river. The area is apt to vary owing to the changes effected from year to year by the Ganges, the deep stream being generally recognised as the revenue boundary, except in the case of some marsh land belonging to the village of Nijabatpura. The average for the five years ending in 1906 was 63,642 acres or 99.4 square miles.

The pargana differs from Bijnor in possessing no alluvial cultivation. The *khadir* of the Ganges is here very narrow, and consists almost wholly of an inferior clay and sand, producing little but tamarisk and coarse grass. It terminates in a fairly steep bank, from the crest of which the upland plateau stretches eastwards for several miles. On the western extremity the ground

is broken by ravines, but elsewhere the tract is gently undulating, with a light soil rising occasionally into sandy ridges. The only drainage channel is the Chhoiya, which for some miles separates the pargana from Bijuor and then crosses the upland from north to south, turning west along the Bashia border and eventually falling into the Ganges in the extreme south-east corner. Chhoiya only holds water after heavy rain, but along its banks is a fertile strip of alluvial soil, though the area is extremely small except in the village of Jahanaba'l. Beyond the Chhoiya the uplands continue till they terminate in a ridge of sand running north and south between Jhalu and Nagal. Adjoining this ridge on the west, however, is a remarkably fertile tract of loam, containing a considerable admixture of sand, which is supposed to have formed the bed of a large inland lake. This portion is highly cultivated and covered with numerous hamlets, whereas in the sandy uplands to the west the tillage is of a very inferior quality and the population sparse.

In the eastern portion of the pargana the level drops, and the country changes into a highly developed tract with a rich soil of clay and stiff loam. The surface is level, sloping gently to the south, and the drainage is effected by the western channel of the Ban. This river has a well-defined bed, but in seasons of heavy rainfall it is apt to overflow its banks, flooding the adjacent fields and at times causing saturation. All this eastern portion is liable to damage from an excess of moisture, whereas the uplands suffer from the other extreme, having no means of irrigation and being solely dependent on good and seasonable rains. The soil classification of the last settlement shows a greater preponderance of inferior land than in any other part of the district. Only 37 per cent. is classed as loam, and 6.7 per cent. as clay, while bhur constitutes no less than 35 per cent., the remainder being the light sandy loam known as bhur sawar.

Taking its natural disadvantages into consideration, the pargana has reached a very fair stage of development. In 1835 the cultivated area was 33,199 acres, and this rose to 42,560 acres thirty years later. Since that time the amount has fluctuated according to the nature of the seasons, and at present the figure is probably below the normal. The average for the five years ending

in 1906 was 42,178 acres or 66·3 per cent. of the whole, the remainder comprising 7,288 acres or 11·4 per cent. returned as barren, and 14,176 acres or 22·3 per cent. as culturable. Both these require some qualification, for of the former 1,874 acres are under water and 2,900 acres are occupied by village sites, roads and buildings, leaving but 2,514 acres of actually sterile land; while of the latter 1,021 acres are covered by groves, and 8,966 acres are either recent fallow or land prepared for sugarcane. In the poor soils long periods of fallow are necessary, so that land ordinarily under cultivation frequently appears under another heal; there is probably room for some extension of tillage, but much of the area shown as available is of a very inferior description and its classification as arable is at least doubtful.

The character and quality of the crops vary greatly in the different portions of the pargana. The kharif is the principal harvest, averaging 27,072 acres, as against 18,238 acres sown in the rabi, while only 3,200 acres or 7.6 per cent. of the net cultivation are double-cropped, the proportion being unusually low, as is also the case in Chandpur and Bashta to the south. The chief kharrf staple is bajra, generally sown with arhar, the two averaging 38.8 per cent. of the area tilled for the harvest. Its prevalence, which is relatively more marked than in any other part of the district, indicates the presence of a light and unproductive soil, as also does the low proportion of lice, occupying 17.2 per cent. Next comes sugarcane, with 156 per cent., the crop doing extremely well in the eastern half, while the area has been greatly extended of late years: the remainder consists in the coarse pulses, such as urd, mung, moth, and juar grown for fodder, the smaller millets, and cotton. In the rabi barley preponderates to an unusual extent, averaging 63.9 per cent. of the area sown, though this includes the mixtures of barley with wheat and gram. Wheat, sown by itself, amounts to 20.8, and gram to 11.4 per cent. The former has improved its position, but the outturn of wheat in Daranagar is still less than in any other pargana. Few of the crops obtain irrigation, the area watered averaging but 997 acres, supplied mainly from wells, which can be constructed without difficulty in the east, while the numerous small tanks are utilised when necessary, and a few villages are served by the Ban,

The cultivators of the pargana are chiefly Jats, Chauhans. Gujars, Brahmans, Sainis and Chamars, followed by Musalmans. Most of these are husbandmen of a high order, but the Gujars form a notable exception to the rule, and still seem to devote themselves to their old habit of cattle-thieving. Grain rents still prevail in more than half of the pargana, and the cash rates vary considerably according to the nature of the soil. At the present time they average Rs. 4-9-3 per acre in the case of occupancy tenants, and In 1906 the total included in hold-Rs. 6-5-9 for tenants-at-will. ings was 50,877 acres, of which 14.3 per cent. was cultivated by proprietors, 31.4 per cent. by occupancy tenants, and 52.2 per cent. by tenants without rights. About 3.7 per cent. of the area is sublet, shikmis paying Rs. 5-4-11 per acre. The revenue demand, as assessed at successive settlements, will be found in the appendix: at the last revision an enhancement of some 38 per cent. was taken, but the incidence is still below the average for the district, although this is only to be expected in a tract containing so much inferior land.* There are eight alluvial mahals along the Ganges, last assessed in 1903 at Rs. 172.

The pargana contains 152 villages, at present divided into 387 m.thals, and of the latter 134 are single, and 148 joint zaminduri, 51 are bhury ichara. 16 are perfect pattidari and 38 are held in the imperfect form of the same tenure. The proprietors are chiefly Chauhans, Gujars, Jats, Banias and Brahmans. The largest estate is that of the Haldaur family, who together own 17 villages and 39 mahals with a revenue of Rs. 22,863. Next comes the Rani of Landhaura with six villages and one mahal, as well as a considerable area mortgaged by the Chauhans of Haldaur. The Tajpur Tagas own three villages and five mahals, and two villages and 11 mahals belong to Gurdayal Mal, a wealthy Khattri of Bijnor. The money-lending classes have largely increased their possessions of late years, but the proprietary communities have maintained their position with fair success.

The population of the pargana has been subject to constant fluctuations during the past half-century. The total in 1853 was 45,381, but this fell to 37,028 in 1865, only to rise to 42,383 in 1872. A decline was again observed in 1881, when the number

^{*} Appendix, tables IX and X.

of inhabitants was 38,131, but ten years later the total was 40,594, and in 1901 reached 42,727, of whom 20,012 were females. Classified by religions there were 30,481 Hindus, 11,983 Musalmans, and 263 others, chiefly Christians. Daranagar contains several market towns, though none is of any great size; the chief places are Daranagar or Ganj, Jhalu and Haldaur. The tract has neither railway nor metalled road, but is fairly well supplied with means of communication, since through it pass the three roads from Bijnor to Nihtaur, Moradabad and Chandpur. These are connected by a road from Daranagar to Nihtaur, while others comprise the roads from Daranagar to Bijnor and from Haldaur to Chandpur.

As at present constituted the pargana is of comparatively recent origin. In former days a large portion of its area was included in Jhalu, to which considerable additions were made during the days of Muhammad Shah by a Jat named Rao Jit Singh. It is uncertain whether any changes took place under the rule of Rohillas and the Nawab Wazir of Oudh, but after the cession of the pargana to the British the tract was divided into three parganas of Jhalu, Daranagar and Haldaur. They remained distinct till 1844, when Jhalu and Haldaur were abolished, the largest portions being amalgamated with Daranagar.

DHAMPUR, pargana and tahsil DHAMPUR.

The capital of the pargana and tahsil of this name is a considerable town standing in 29° 18′ N. and 78° 31′ E., at a distance of 24 miles east-south-east from the district headquarters. It is admirably situated on high ground, above the right bank of the river Khoh, which flows some three miles to the east, at the junction of five roads, of which that leading to Bijnor is metalled as far as Nihtaur. The others run south-west to Nihtaur, north-east to Sherkot, south-east to Seohara and Moradabad, and north-north-west to Nagina and Najibabad. Parallel to the last two runs the railway, passing to the west of the town, with a station less than half a mile distant from the main site. The town is well drained by a small watercourse known as the Ekra, which carries off the surplus water from the numerous ponds and depressions in the vicinity.

The population at the first census of 1847 was said to be 8,207, but this appears to be wholly excessive. In 1853 the total was 5,633, and this rose to 5,651 in 1865, and to 6,555 in 1872. The census of 1881 witnessed a decline, the number of inhabitants falling to 5,708, but the place soon recovered, the figure rising to 6,708 in 1891, while at the last census Dhampur contained 7,027 souls, of whom 3,771 were Hindus, 3,006 Musalmans, 149 Jains, 46 Christians, and 55 Sikhs and Aryas.

The place figures but little in history, and nothing is known of its foundation. In 1750 it rose to prominence on account of the defeat here inflicted on the imperial forces under Qutb-uddin by the Rohilla leader, Dunde Khan. The town suffered somewhat severely at the hands of Amir Khan Pindari during his incursion in 1805; and the part that it played in the Mutiny annals has been mentioned in the general account for the district. It was not till 1844 that Dhampur supplanted Sherkot as the headquarters of the pargana and tahsil, the change being made on account of its more central position and greater accessibility.

The town has a neat and thriving appearance, with wellpayed streets and a general aspect of cleanliness. The public health is very good and epidemics are rare, while sanitation is rendered easy by the excellent drainage system. There are numerous open places with some fine old trees, and many good wells, the water of which is justly celebrated. The main bazar along the Moradabad road is a wide and busy thoroughfare, lined with substantial shops, occupied largely by dealers in ironware. The prosperity of the place is due in no small degree to the trade in iron and other metals, and the chief manufactures are locks, brass candlesticks and carriage ornaments, gongs. bells and domestic utensils. In former days Dhampur was famed for its gunsmiths, and a local workman obtained a prize for matchlocks at the Paris Exhibition of 1867. The iron is imported, principally from Hathras in the Aligarh district. There is no special market day, but in Fatehullahpur to the north there is a second bazar, in which markets are held twice a week. the same village an annual fair takes place in Chait in honour of Bale Salar, and a second occurs in Sawan at the festival of Zahir Diwan, while weekly gatherings are held in honour of Debi.

In Dhampur itself the Ramlila is observed by a considerable number of Hindus. To the north of the town stand the tahsil buildings, and to the south-east is the sarai, a large enclosure shaded by some fine tamarind trees. Other institutions of the place comprise the police-station, post-office, registration office, a cattle-pound, and a private dispensary. There is a flourishing middle vernacular school, a lower primary school for boys and another for girls, both supported by the municipality, and an aided school which receives a grant-in-aid from municipal funds. The American Mission has a small station in the town.

Dhampur has been administered as a municipality since 1866. Its affairs are managed by a board of eleven members, of whom ten are chosen by election. A very prominent part in the conduct of local business has been taken by Chaudhri Ranjit Singh of Sherkot, whose services have been recognised by the conferment of the title of Rai Bahadur. The income is derived mainly from an octroi tax on imports, while small sums are obtained from rents of land and houses, the cattle-pound, and the sale of manure. Details of receipts and expenditure for each year since 1891 will be found in the appendix.*

The town is the seat of several well known families who own land in the Dhampur pargana. The chief is the Chauhan family of Chaudhris, at present headed by Chaudhri Sher Singh, who holds six villages. The Kayasths of Dhampur are represented by Musammat Tara Kunwar, who owns five villages and part of another. There are also Lala Badri Prasad, of a wealthy Bania house, which has a valuable and growing property; Jumna Kunwar, a Bishnoi lady; and Muhammad Sibghat-ullah, the principal Sheikh resident of the place.

DHAMPUR pargana, tahsil DHAMPUR.

This is the largest of the four parganas which constitute the tahsil of Dhampur, having a total area of 100,854 acres or 158 square miles. It occupies the north-eastern portion of the subdivision, marching with Nihtaur on the west, and with Burhpur and Seohara on the south; to the north lie Nagina and Barhapura, and to the east Afzalgarh, the boundary for a considerable distance

^{*} Appendix, Table XVI.

being formed by the Ramganga. In former years that river constituted the actual frontier, but its vagaries resulted in so many changes that a conventional boundary was adopted, so that some of the villages on either bank now belong to Afzalgarh and some to Dhampur.

The pargana is of a very diversified aspect. The western and largest portion belongs to the uplands or bangar, drained by the Gangan, which constitutes the western boundary, the Karula, Ekra and a few small tributaries, which flow in a southerly direction and are all utilised for irrigation. Gangan supplies the Nihtaur canal and its branches, already described in chapter II, while the north-west of the pargana is served by the western distributaries of the Nagina canal system. The villages along the Gangan are the best in the whole tract, but all the upland is of good quality, save for two patches of sandy soil, one to the north of Dhampur, and the other on the southern border. Apart from these, the surface is fairly level and is covered with a loam and clay soil, though towards the high bank _ in which the uplands terminate on the west the fertility is less remarkable and the population less dense. Water is seldom more than 15 feet below the surface, and wells are constructed without difficulty; but the supply is inadequate, and only the canal villages are fully irrigated, giving them a great advantage over the rest of the tract.

The upland slopes down on the west to the khadir of the Khoh, a low alluvial basin traversed by several insignificant streams, such as the Paodhoi in the north and the Kanjan in the south, the former rising near Nagina and joining the Khoh at Ahmadpur Gorwa, and the latter originating to the east of Dhampur and passing out of this pargana at Basehra Khaddar on the southern boundary. The khadir is of varying breadth, the high bank following the line of the extreme western action of the river in former years. The greater part is quite unaffected by the Khoh, and is a rich stretch of stable cultivation, highly tilled, and with a naturally moist soil that requires no irrigation. The alluvial land near the river is of a poor and sandy character, for though the river is not violent in its action and seldom changes its course or indulges in extensive floods, still land once

rendered unculturable by the Khoh takes long to recover, and produces little beyond a scanty growth of thatching grass. In the south-east corner of the pargana the Khoh joins the Ramganga, which is far more effective in its action. Between the two rivers is a stretch of high uneven land, scored by ravines, and covered with numerous patches of scrub and thorn jungle, particularly in the north, where wild animals do much damage to the crops. The population is scanty, and save for the town of Sherkot, there are no large sites; the water-level is here too deep to admit of irrigation, and the only superior crop grown to any extent is cotton.

This tract terminates in the khadir of the Ramganga. This is a low belt of uniform character, with a stiff and productive soil, sufficiently moist to need no irrigation, well populated and fairly cultivated. It is drained by the Singhai and Banaili, small streams which rise in pargana Afzalgarh and join the Ramganga near Teparjot. These natural channels inadequately perform their function in wet years, and flooding results; but the danger of saturation is small, and the only real fear is that the Ramganga may return to its ancient course under the town of Sherkot and devastate the whole of this flourishing tract. The land in the near vicinity of the river is better than that adjoining the Khoh, but is very precarious by reason of the constant changes in the course of that erratic stream. In wet seasons it is moist and unproductive, but under favourable conditions it is cultivated with success, the deposit left by the river being generally of a fertile character.

Taking the pargana as a whole, 67 per cent. has a loam soil, 25.6 per cent. clay, and the remainder is a light and inferior loam known locally as bhur sawai, the amount of actual bhur being almost insignificant. Considering its natural capabilities, the tract is well developed, and there has been a large expansion of cultivation since 1835, when the area under the plough was 46,754 acres. This had risen to 60,926 acres in 1865, while for the five years ending in 1906 the average was 64,185 acres or 63.6 per cent. of the whole. The remainder comprised 15,314 acres or 15.2 per cent. classified as barren, and 21,355 acres of culturable waste. Both figures require some explanation, for of

the former 7.384 acres are covered with water, and 3,930 acres are occupied by railways, roads, village sites and the like, leaving only 4,000 acres of land unfit for tillage, mainly along the rivers and in the poor jungle tract to the east; and of the latter 1,010 acres are under groves, and 5,797 acres are new fallow or pandra reserved for sugarcane. This still leaves a considerable area for further tillage, and an extension of cultivation may be expected in the future, though much of the available waste is of a very inferior description. The improvement already achieved is greater than at first sight appears, for there has been a great advance in the matter of double-cropping, which now averages 20.6 per cent. of the net cultivation. This has resulted in a marked increase in the rabi area, though the kharif is still the more important, averaging 46,618 acres as compared with 30,491 acres sown in the former. Half the kharif consists in rice, and next comes sugarcane with 18 per cent., followed by cotton with 8.8, maize with 5.7, and bajra and arhar with 4.4 per cent. The sugarcane area has decreased somewhat of late years, but is still very large; another change is the striking rise in the maize and rice areas, the former having grown in popularity to a remarkable extent, as is also the case in Afzalgarh. In the rabi wheat occupies 40.1 per cent. of the land cultivated, and has rapidly extended. Barley, sown by itself or mixed with gram and wheat, covers 30.7, gram 11.5, and oilseeds 6.6 per cent.

The irrigated area averages 6,996 acres or 10.9 per cent. of the cultivation, but the annual variations are great. The proportion is high for this district, and would be very much higher, were the *khadir* lands and the eastern jungle tract eliminated, these either requiring no irrigation or else possessing no facilities. Canals supply 3,893 acres and wells 2,710 acres or 38.7 per cent.; so that other sources are of little account. In time of need, however, the numerous tanks in the western uplands are freely utilised: some of them are fairly large, the chief being those at Manpur, Basehra, Jamalpur and Nindru.

The Chauhans far outnumber other cultivators, and own nearly half the entire area. Next to them come Sainis or Baghbans, as they are termed in this pargana, and then Jats, Sheikhs, Chamars, Brahmans and Gujars. In 1906 the area

included in holdings was 69,768 acres, and of this 10.7 per cent. was sir or khudkasht cultivated by proprietors; 41 per cent. was held by occupancy tenants, and 46.9 per cent. by tenants-at-will, the remainder being chiefly ex-proprietary cultivation. Rents are high, but vary according to the nature of the land: on an average occupancy tenants pay Rs. 6 and tenants-at-will no more than Rs. 5-10-0 per acre, the difference being due to the fact that the former class are in possession of the superior holdings. A small area, about 3.4 per cent. of the whole, is sublet, the average rate being Rs. 6-2-0. For the variations in the revenue demand at successive periods reference may be made to the appendix; a large enhancement of about 36 per cent. was taken at the last revision, and the present incidence is considerably above the average figure for the district, being in fact exceeded only in Nihtaur and Nagina.* The alluvial lands, being the property of large proprietors, were in many cases settled for the full term; they number 71 in all, and were last inspected in 1905, when the revenue was settled at Rs. 6,884.

The pargana contains 240 villages, now divided into 466 mahals. Of the latter 218 are held in single, and 175 in joint zamindari tenure: 54 are bhaiyachara, 11 are imperfect and eight are perfect pattidari. The proprietors are mainly Chauhans, Tagas, Musalmans, Kayasths, Banias and Bishnois. The chief proprietor is Chaudhri Ranjit Singh of Sheikot, who owns 74 villages, assessed to a revenue of Rs. 43,643. The Tagas of Tajpur hold 33 villages and nine mahals, paying Rs. 25,170, and the Chaudhris of Kanth hold nine villages. Other proprietors include the Chauhan Chaudhris of Dhampur, the Banias, Kayasths and Bishnois of the same town, the Chauhans and Sheikhs of Sherkot, and the Chauhans of Muhammadpur, Parma, Jaitra and Amkhera.

The population of the pargana has increased steadily since 1853, when it numbered 76,199 persons. From 80,197 in 1865 it rose to 84,630 in 1872 and to 85,033 in 1881; ten years later it was 89,714, while in 1901 the number of inhabitants was 90,327, of whom 43,698 were females. Classified according to religions, there were 57,934 Hindus, 31,629 Musalmans, and 764 others.

^{*} Appendix, Tables IX and X.

Besides the towns of Dhampur and Sherkot, the pargana contains no place of any size or importance, except perhaps the large agricultural villages of Nindru, Jaitra and Athain. The tract is fairly well provided with means of communication, at any rate in the western half, which is traversed by the railway, with a station at Dhampur. Through that place runs the road from Moradabad to Nagina, with a metalled branch leading to Nihtaur. Other roads comprise those from Dhampur to Nurpur and Afzalgarh, the latter passing through Sherkot, where it crosses a road from Nagina to Kashipur. Travelling is rendered difficult by the absence of bridges over the Khoh and Ramganga, the passage of which has to be accomplished by ferries.

The pargana was formerly known as Sherkot, and is mentioned under this name in the Ain-r-Akbari. The Tabaqat-i-Akbari records the fact that it was held in 1587 by one Mir Abul Fateh, but the identity of this person cannot be discovered. When seized by the Rohillas in 1748 it was the feof of Safdar Jang, and was apparently known at that time both as Dhampur and Sherkot. The name was finally changed to Dhampur on the removal of the tahsil headquarters to that place in 1844.

DHAMPUR tahsil.

This subdivision comprises the south-eastern portion of the district, and forms a compact rectangular block of country, bounded on the north and east by Nagina, on the west by the Bijnor tahsil, and on the south-east and south by the Moradabad district. As at present constituted, it contains the four parganas of Dhampur, Nihtaur, Seohara and Burhpur, the last having been added on the abolition of the old Chandpur tahsil, and at the same time receiving half the original Chandpur pargana, the former boundary of which was the Ban river. The area, which is liable to change owing to the action of the Ramganga on its eastern border, amounts to 293,675 acres or 458.8 square miles, taking the average returns for the five years ending in 1906.

The several parganas are fully described in the separate articles. In its general aspect the tahsil consists of three main portions or strips running north and south. On the west are the central uplands, a rich, highly cultivated, and densely populated

tract, traversed by the Ban and Gangan rivers; then come the eastern uplands, forming the watershed between the valleys of the Gangan and Khoh, drained by these rivers as well as by the Ekra and Karula, and protected to a large extent by canal irrigation; and beyond this the level drops to the east into the basin of the Khoh and the low alluvial tract between that river and the Ramganga. It is consequently of a far from uniform character, much of the cultivation being as old and as stable as any in the district, while elsewhere it is shifting and in great measure precarious.

The prosperity of the tahsil has been much enhanced and assured by the improvement in means of communication. main line of the Oudh and Rohilkhand Railway traverses the two western parganas, passing through the towns of Sahaspur, Seohara and Dhampur, with a station at each place. Parallel to this on the east runs the road from Moradabad to Nagina and Hardwar, with metalled branches giving access to the various stations. A metalled road also connects Dhampur with Nihtaur, and besides these there is a perfect network of unmetalled roads in the eastern half. Among these is that from Moradabad to Bijnor, passing through Nurpur, whence others radiate to Sechara, Dhampur, Dhanaura, Chandpur and Nihtaur. From Nihtaur roads run to Chandpur, Daranagar, Bijnor, Kiratpur, Najibabad and Nagina. East of the railway, however, roads are few and inferior, the nature of the country and the presence of large and generally unfordable rivers rendering communication difficult. One road leads from Dhampur to Sherkot and Afzalgarh, and another goes from Nagina to Kashipur, crossing the former at Sherkot. passage of the Khoh and Ramganga is effected by means of ferries, of which a list will be found in the appendix. The position of the various roads can best be ascertained by a reference to the map.

The tahsil contains the municipality of Dhampur, the Act XX towns of Nihtaur, Sherkot and Seohara, and a few other places of some size, such as Sahaspur and Tajpur. The markets, fairs, post-offices and schools of the tahsil are shown in the appendix. Statistics of the population prior to 1891 are not available, owing to the change of area, by which pargana Burhpur was largely increased in size. The number of inhabitants in 1891

was 254,011 and this rose at the census of 1901 to 265,185, of whom 127,139 were females. The tract is therefore by far the most densely populated part of the district, and was the only subdivision to exhibit a marked increase at the last enumeration. Classified according to religions, there were 172,593 Hindus, 89,860 Musalmans, 1,542 Aryas, 549 Jains, 503 Christians, and 138 Sikhs. Among the Hindus the strongest castes numerically are Rajputs, of whom there were 37,714, though no fewer than 30,223 of these were Chauhans, the great majority being of more than doubtful Chhattri origin; the remainder included 1,164 Jadons, 1,053 Kachhwahas, and fair numbers of Jaiswars, Gaurs, Chandrabansis and Bargujars. Next come Chamars, 35,412; Malis. 15,243; Jats, 10,836; Brahmans, 8,719; Gujars, 6,232; and Banias, 5,754. Other castes with more than 2,000 members apiece are Barhais, Ahirs, Gadariyas, Tagas, Bhangis, Kumhars, Kahars, Sainis, Nais, Koris and Ramaiyas, the last being almost wholly confined to this tahsil. Julahas take the lead among Musalmans with 19,006 representatives, and they are followed by Sheikhs with 17,641, Telis with 5,664, Behnas with 4,634, Faqirs with 4,295, and Saiyids with 4,065, the rest being mainly Hajjams, Pathans, Qassabs, Chhipis, Rajputs and Darzis.

As usual, the bulk of the population depend mainly on the cultivation of the soil for their means of subsistence, the agricultural population proper being 47 per cent. of the whole, though this leaves out of account the large number who betake themselves to tillage as a subsidiary means of support. Textile fabrics account for some ten per cent., general labour seven per cent., the supply of food and drink six per cent., while about four per cent. in either case come under the heads of pasture and cattle-breeding and of work in wood, cane and forest produce. There is an extraordinary number of beggars, no fewer than 9,187 persons being returned as mendicants.

For administrative purposes the tahsil forms a subdivision in the charge of a full-powered officer on the district staff. The tahsildar has his headquarters at Dhampur, where they have been located since the transfer from Sherkot in 1844, and in addition there are at present three honorary magistrates: Raja Sham Singh of Tajpur for the whole tahsil, excluding the Nihtaur police circle;

Chaudhri Ranjit Singh Rai Bahadur of Sherkot for the Dhampur and Sherkot circles, and Chaudhri Basant Singh Rai Bahadur for pargana Seohara. Under the existing arrangement, the tahsil is divided between the police circles of Dhampur, Sherkot, Nihtaur, Seohara and Nurpur, while a portion of pargana Burhpur is included in that of Chandpur in tahsil Bijnor. This distribution will remain unaltered for the present, as each circle is of fair size and the stations are conveniently situated. The civil jurisdiction of the tahsil is divided between the munsifs of Nagina and Bijnor, the former's charge comprising all but pargana Burhpur. Village munsifs have not as yet been introduced.

GANDAUR, pargana Bashta, tahsil Bijnor.

A small and decayed agricultural village standing in 29° 10' N. and 70° 12′ E., at a distance of five miles north-west from Chandpur and 18 miles south from the district headquarters. The main site is built on the high bank overlooking the khadir of the Ganges: part of the village lies in the lowlands below the cliff, but the greater portion is high and sandy. The total area is 327 acres, of which 135 acres are cultivated; and the revenue is Rs. 175; it is held in joint zamındari tenure by Banias and Brahmans. The population at the last census numbered 594 persons, of whom 95 were Musalmans. The place deserves mention merely as possessing a post-office and a lower primary school; there is an old temple in the village, of no architectural importance, and close by a small fair is held during the month of August. In old days Gandaur was a more notable place. since it gave its name to a pargana at least as early as the time of Akbar. This now extinct subdivision is included partly in Bashta and partly in Chandpur.

GANJ, vide DARANAGAR.

HALDAUR, pargana Daranagar, tahsil Bijnor.

A small market town standing in 29° 17′ N. and 78° 17′ E., on either side of the road from Daranagar to Nihtaur, at a distance of 11 miles south-east from the district headquarters. A second road runs south to Chandpur, crossing that from Bijnor

to Moradabad at Amhera, two miles to the south. The population in 1872 numbered 4,323 souls, and this rose in 1881 to 4.909. and ten years later to 5,642. Since that date it has remained stationary, and in 1901 the place contained 5,628 inhabitants, of whom 945 were Musalmans; the prevailing Hindu castes are Chauhans, Banias and Chamars. Haldaur possesses a post-office, an upper primary school and two aided schools. Markets are held four times a week in the bazar, and the trade is considerable. The town contains several Hindu temples, but none of these is of any architectural importance. The area of the revenue mauzu is 1,929 acres, of which some 1,265 acres are cultivated, and the assessment is Rs. 4,750: the tenure is perfect pattidari, and the proprietors are Chauhans. Haldaur is said to have been founded by Halda Singh, the ancestor of the leading family, now represented by Raja Harbans Singh, the nephew, and Kunwar Tejbal Bikram Singh. the son of the late Raja Maharaj Singh. Some account of the family has been given in chapter III; the title of Raja is personal only, and was recently conferred on the elder represent-The family reside in a handsome house in the town built by Maharaj Singh.

JAHANABAD, pargana Daranagar, tahsil Bijnor.

A village of no great size, standing in 29°15′ N. and 78°7′ E., on the high left bank of the Ganges, two miles south of Daranagar and eight miles from the district headquarters. It contained in 1901 a population of 1,084 inhabitants, of whom 640 were Musalmans, chiefly Sheikhs. The village lands are 2,926 acres in extent, but of this a large portion consists of sandy waste and only 1,460 acres are under cultivation; the revenue is Rs. 2,475, and the proprietors are the Chauhans of Haldaur, Brahmans, Banias, Sheikhs and Saiyids. Most of the land was confiscated after the mutiny and bestowed on the Haldaur family in reward for their loyalty. A small portion has been assigned by them for the maintenance of the custodian of the tomb, which gives the place its sole elaim to mention. This is the mausoleum of Nawab Saiyid Muhammad Shujaat Khan, a nobleman of the reign of Aurangzeb. He was the son of Jahangir Khan, whose father was the famous

Seivid Mahmud, the most distinguished member of the Kundliwal branch of the Barha Saivids * Shujaat Khan, who is said to have held ligh office in Gujarat, left the family home at Majhera, and settled at Gordhannagar, the name of which he changed to Jahanabad in honour of Shahjahan, by whom the land was given after his successful campaign in Bengal. The property of Shujaat's descendants was confiscated for rebellion in 1858. The tomb was built in 1647, and is a handsome structure standing pictures quely on the overhanging bank of the river, in an area of about ten acres surrounded by a wall of block kankar. The gateway is faced on the inner side with grey sandstone, and the outer front was once adorned with encaustic tiles. The tomb itself is built on a raised masonry platform about ten feet high, and is approached by a flight of steps. The basement is faced with the same grey sandstone as the gate, and also with red sandstone from Agra. The sarcophagus is of white marble covered by a cupola of grey sandstone supported on lofty pillars of the same material, and railed in by a lattice work in red stone. On the lower portion of the cupola are engraved texts from the Quran; but both the tomb and the gateway are in a sadly dilapidated condition and need careful repair.

JALALABAD, pargana and tahsil Najibabad.

A flourishing little town standing in 29° 35′ N. and 78° 19′ E., on either side of the unmetalled road from Najibabad to Bijnor, two miles south-west from the former and 19 miles from the district headquarters. Close to the site on the north runs the main line of railway, Najibabad station being little more than a mile to the east. The town is said to be of great antiquity, and to have been founded by Jalal-ud-din Firoz Shah, the first of the Khilji Sultans of Dehli, and in the days of Akbar it gave its name to the pargana, the change dating from the foundation of Najibabad in 1755. From that time the importance of Jalalabad vanished, but there still remains a bazar of some local note. The population, which in 1872 numbered 3,001 persons, had dropped by 1891 to 2,956, but at the last census the place contained 3,511 inhabitants, of whom 2,584 were Musalmans. The lands of Jalalabad are 779 acres in extent, and of this 605 acres are cultivated; the revenue

^{*} Gazetteer of Muzaffarnagar, p. 173.

is Rs. 1,753, and the proprietary right is vested in an old and respectable family of Qazıs, who reside in the town and own a considerable estate in the neighbourhood. The place possesses a post-office, a lower primary school and two aided schools; a small fair is held here during August in honour of Zahir Diwan.

JHALU, pargana DARANAGAR, tahsil BIJNOR.

A market town of some importance, standing in 29° 20' N. and 78° 14' E., on the south side of the road leading from Bijnor to Nihtaur, at a distance of six miles east-south-east from the district headquarters. It is built on a level plain, some 785 feet above the sea, and consists principally of mud houses separated by narrow and irregular streets. The town is of some antiquity, giving its name to a pargana as early as the days of Akbar: the subdivision remained intact till 1844, when it was abolished and merged in the surrounding parganas. Jhalu possesses a considerable bazar, in which markets are held twice a week, the trade being chiefly in agricultural produce. There is a post-office here, as well as a cattle-pound, a large upper primary school, two aided schools, and a school for girls. The population in 1847 numbered 6,551 souls, but this dropped to 5,716 in 1853 and to 5,522 in 1865. It then rose to 5,979 in 1872, but fell again to 5,547 in 1881, though ten years later it was 5,672. At the census of 1901 a marked increase was observed, the number of inhabitants being 6,444, of whom 3,254 were Musalmans. The latter are principally Julahas, who carry on their ancestral trade of weaving, while the Hindus are mainly Banias and Jat cultivators.

The lands of Jhalu are 2,119 acres in extent, some 1,400 acres being under cultivation, and are assessed at Rs. 4,353. They are held in several forms of tenure by Banias, Jats, Brahmans, Khattris, Sheikhs and Saiyids, one of the proprietors being Gurdayal Mal, a large Khattri landowner of Bijnor. The town proper covers 154 acres, and this area has been administered since 1875 under Act XX of 1856. The number of houses in the town in 1906 was 1,587, of which 770 were assessed to taxation, the income from the house-tax for that and the two preceding years averaging Rs. 1,000 annually, which gives an incidence of Re. 1-5-8 per assessed house and Re. 0-2-7 per head

of population. The total income, including the opening balance, was Rs. 1,287, while the expenditure averaged Rs. 1,227: the chief items were Rs. 494 for the upkeep of the town *chaukidars*, Rs. 293 for the maintenance of a conservancy staff, and Rs. 235 for minor improvements.

KAURIA, pargana and tahsil NAJIBABAD.

Kauria is a tiny hamlet in the extreme north-eastern corner of the pargana, standing in 29° 44′ N. and 78° 30′ E., at the place where the road from Najibabad to Kotdwara crosses the submontane road and enters the Garhwal district: a second road converges on this point, leading from Nagina and Kot Qadir. It is 13 miles north-east from Najibabad, and 34 miles from the district headquarters. To the east of the Kotdwara road runs the branch line of railway from Najibaba'l, the nearest station being at Kotdwara, just beyond the district border. The place merely deserves mention as possessing an outpost of the Najibabad police-station; there was formerly a third-class thana here and a post-office, but these have been abolished. The population of the place at the last census was only 22 persons, all of whom were males. The revenue mauza of Kauria is 1,496 acres in extent, but the whole of this is forest land, and there is no cultivation; it is held by the Jats of Sahanpur in joint zamindari tenure at a revenue of Rs. 175.

KIRATPUR, pargana KIRATPUR, tahsil NAJIBABAD.

The chief town in the pargana of the same name stands in 29° 30′ N. and 78° 13′ E., at a distance of ten miles north-east from Bijnor and eleven miles from the tahsil headquarters. Through it runs the road connecting Najibabad with Bijnor, while others lead west to Mandawar, south-east to Nihtaur, and east to Akbarabad and Nagina. The town is built on high ground above the valley of the Malin, which flows some two miles off to the west. There are two distinct sites or muhallas, Kiratpur Khas and Basi Kotla, the latter lying to the south, between the Bijnor and Mandawar roads. The former is the older and is said to have been founded during the days of Bahlol Lodi. At all events it is of considerable antiquity, as the

place in Akbar's day was already the capital of a pargana, and was even then the residence of the family of Muftis, whose descendants are among the most prominent landholders of the district and possess some very old and interesting papers. Basi Kotla is of more recent origin, and probably does not date back further than the middle of the eighteenth century, when it was colonised by Pathans. It contains the ruins of a Rohilla fort. locally ascribed to Fateh Khan Khansaman, though more probably the builder was Najib-ud-daula. The walls are still standing on either side of the main gateway, and within is a handsome mosque in a good state of preservation. The principal quarters have disappeared, but some of the smaller buildings are in existence and used for human habitation. Below one of the ruins is a large tahkhana or underground chamber, and within the ramparts is a magnificent well. Adjoining the fort on the outside is a fine masonry tank, though this too is in a state of decay. Part of the fort was destroyed after the mutiny, and the site is no longer held by the descendants of the founder, having been sold several years ago in execution of a decree. Another old building of the same date stands to the east of Basi, representing the remains of a court and office, enclosed by high brick walls.

The main bazar extends for a considerable distance along the Najıbabad road, which is here paved with brick. Markets are held in it weekly, but the trade of the place is insignificant, the only manufacture being that of lacquered and painted chairs and boxes. These are not produced in any great quantities, and seldom find their way beyond the borders of the district. The town possesses a police-station, post-office, cattle-pound, a middle vernacular school with a boarding-house attached, and six lower primary aided schools for boys. A considerable fair is held in the town during the month of August in honour of Zahir Diwan. A branch post-office is maintained in Basi Kotla.

The population of Kiratpur has steadily increased during the past fifty years, and the town is now one of the largest in the district. In 1847 the place contained 7,878 inhabitants, and by 1853 the total had risen to 9,567. There was a temporary decline in 1865, when it numbered 8,971, but recovery was rapid, for in

1872 there were 9,579 residents, the figure rising to 12,728 in 1881, and to 14,823 in 1891. At the last census in 1901 the population numbered 15,051 souls, including 7,969 females. Classified by religions, there were 10,435 Musalmans, 4,277 Hindus and 339 others, mainly Aryas and Christians. The bulk of the inhabitants are Pathans, Jats, Julahas and Chamars.

The town, which has much improved in appearance of late years, has been administered under Act XX of 1856 since 1865. The income consists mainly of the house-tax, which was levied in 1906 on 1,340 out of a total of 3,047 houses. For the three preceding years it averaged Rs. 1,914, falling with an incidence of Re. 1-8-0 per assessed house and Re. 0-2-1 per head of population, these figures being respectively the highest and lowest rates in any of the chaukidari towns of the district. The miscellaneous income is considerable, the average total receipts for the same period, including the opening balance, being Rs. 2,909 annually, while the expenditure was Rs. 2,592, the chief items being Rs. 1,146 for the upkeep of the local police force, Rs. 509 for the maintenance of a conservancy staff, and Rs. 730 for paying, lighting and minor improvements. The chaukrdarı area is 370 acres, while that of the revenue mauza is 1,889 acres in extent: about 1,075 acres are cultivated, and the revenue demand is Rs. 4,022. The land is held in bhuryachara tenure by the five members of the Mufti family. Basi Kotla is the property of Pathans, who enjoy a similar tenure and pay a revenue of Rs. 1.043: the cultivated area is about 420 out of a total of 767 acres.

KIRATPUR pargana, tahsil Najibabad.

This pargana forms the south-western portion of the Najibabad tahsil, lying to the west of Akbarabad, from which it is separated by the Chhoiya river, while its northern border marches with that of pargana Najibabad, continuing in a very irregular line to the bank of the Ganges, which forms the boundary for about three miles in the extreme north-western corner. To the west lies Mandawar, and to the south pargana Bijnor, both of the Bijnor tahsil. The tract has a length of some thirteen miles from north to south and a mean breadth of about seven miles: the total area is 56,728 acres or 88.6 square miles.

The various natural divisions of the tract present very diverse characteristics. Along the Ganges is a strip of alluvial land, much of it subject to the annual floods of the river, with a soil that is liable to change according to the nature of the deposit. This belt terminates in the old high bank, which rises sheer up to a height of some 75 feet; the land on the crest is sandy and cut up by ravines, the level gradually sloping eastwards towards the centre of the pargana. This raised plateau is naturally of an inferior quality, but the soil has been much improved by generations of careful tillage; the population is scanty, and means of irrigation are almost wholly absent, owing to the fact that water lies about 80 feet below the surface. The level in this block, known to settlement officers as the Tisotra circle, from the village of that name in its centre, is remarkably uniform, and no inequality in the surface is met with for several miles. It is then broken by a drainage channel named the Bhera, which rises near the Najibabad border and flows south to join a larger watercourse known as the Katra at Pundri Khurd; the latter enters the pargana near Hareoli, and falls into the Malin at Dhalampur Bhoja A third stream, called the Lakharhan, drains the villages to the east of the Katra, first touching Knatpur near the village of Sakrauda, and after a course of a few miles joining the Malin at Baqarpur. The ground in the neighbourhood of these streams is very uneven, and the soil is of poor quality, producing little save where it has been constantly cultivated. On the other hand, the water-level is higher and the population more dense than on the plateau above the Ganges.

This tract passes into the rich alluvial loam of the Malin valley, which is perhaps the richest portion of the whole district. Originally, it would seem, the Malin carved out for itself a deep and wide bed, and in the course of many centuries this has become filled with a deposit consisting in successive layers of fertile loam. It possesses much natural moisture, the water-level being but 15 feet below the surface, so that irrigation is unnecessary, and the fullest use is made of its capabilities by the Rawas, who are the most skilled of all the cultivating castes. The stream still floods a considerable area, but erosion in one place is compensated by valuable deposits elsewhere, and the renovating

power of its inundations renders it a blessing rather than a bane. The course of the Malin lies right through the centre of the pargana, of which it receives almost the entire drainage: at first flowing in a south-westerly direction, it turns almost due south at Dharampur Bhoja, passing into pargana Bijnor in the south-western corner, some two miles from the town of Kiratpur.

The bank of the Malin on the western side is marked by a line of steep bluffs, but on the east the land slopes gradually down to the river from an upland tract which extends eastwards to the Chhoiya. This wide plain has a good soil of loam and clay, with a more or less marked inclination to sand in the south-east; it is thickly populated and highly cultivated, producing crops of a good quality without irrigation. The drainage is carried off by the rivers and their small tributaries; the latter comprising, in the case of the Malin, a large ravine which begins near Shujapur and joins the river at Muhammad Asgharpur, and in the case of the Chhoiya, a streamlet known as the Paodhoi, which rises in a jhil at Mochipura and falls into the larger channel near Memon. There are several other jhils and tanks in this part of the pargana, though none is of any great size.

The soil classification of the last settlement showed 52.6 per cent. loam, 168 per cent. clay, 3.6 per cent. bhur, and the remainder the light and inferior loam called bhur sawar. standard of development is high, and has steadily risen since 1835, when 28,447 acres were cultivated. By 1865 it had reached 38,158 acres, while for the five years ending in 1906 the average was 40,020 acres or 70.6 per cent. of the whole. barren area was 7,000 acres, or 12:3 per cent., though of this 2,626 acres were under water and 2,500 acres were taken up by sites, railways, roads and the like, leaving but 1,874 acres of land actually unfit for cultivation. The culturable area was 9,708 acres or 17.1 per cent., but this included 833 acres of groves and 5,279 acres of recent fallow of land prepared for sugarcane, so that the available remainder is small, and much of it too poor to repay tillage. Irrigation is quite insignificant, averaging but 140 acres; this could be largely extended if necessary, though water is not obtainable in the parts which are most likely to suffer in time of drought. The kharif harvest covers on an average 27,614 acres, as against 17,437 acres sown in the rabi, while 12.7 per cent. of the cultivation bears a double crop. The chief autumn staples are rice, occupying 37.2 per cent. of the kharif area, and sugarcane, 20.7 per cent., the latter proportion being the highest in any part of the district. In the lighter soils bayra and arhar are largely grown, averaging 16.6 per cent., while the balance is made up by cotton, the pulses, and the coarser millets, as well as juar grown for fodder. Of the rabi crops, barley, sown alone or in combination, covers 39.6 per cent., wheat 33.8 per cent., and gram 15.2 per cent., no others being of any importance.

The pargana possesses an excellent body of cultivators, the largest proportion of the area being held by Rawas, after whom come Jats, Tagas, Chauhans, Chamars and Sainis, while there is a considerable number of Musalmans. The total area included in holdings in 1906 was 45,552 acres, and of this as much as 19.5 per cent. was proprietary cultivation, while 34.5 per cent. was held by occupancy tenants, 44.4 per cent. by tenants-at-will, and the remainder was chiefly in the possession of ex-proprietors. Rents are much higher in the Malin valley than elsewhere, as is only to be expected; the average occupancy rate is Rs 5-6-1 per acre, as compared with Rs. 5-15-6 paid by tenants-at-will. Nearly five per cent. of the area is sublet, but such land is usually of a poor description, and shikmi tenants pay a rate no higher than that prevailing in Akbarabad. The alterations in the revenue demand at successive settlements will be found in the appendix. The last revision witnessed an increase of nearly 28 per cent. on the expiring demand, and at the present time the incidence is almost the highest in the district.*

The pargana contains 174 villages, which are now divided into 363 muhals, of the latter 108 are single, and 206 joint zamındari, 23 are imperfect, and 17 perfect pattidari, and nine are bhaiyachara. The largest estate is that of the Kiratpur Muftis, now divided into five portions, and comprising 34 villages and five mahals. The Jats of Sahanpur own 35 villages, and a considerable and increasing number are held by the Banias of Najibabad and Kiratpur, while other land-owners comprise the Jats of

^{*} Appendix, tables IX and X.

Tisotra, the Tagas of Sakrauda and Raipur Nawada, the Saiyids of Memon, and the Kayasths of Mandawar.

In 1853 the pargana had a population of 51,344 persons, but this dropped in 1865 to 46,710, and though it again rose to 49,934 in 1872, it fell once more to 47,416. During the next tenyears a rapid increase was observed, the total in 1891 being 54,444, while at the last census the number of inhabitants was 52,670, of whom exactly 50 per cent. were females. Classified by religions there were 29,766 Hindus, 22,001 Musalmans, and 903 others, Aryas, Jains, Christians and Sikhs. The only town is Kiratpur, but there are several large villages such as Banehra, Memon and Barampur. The last place gives its name to a station on the railway, which passes through the north of the pargana from east to west, and then turns north-west along the Mandawar boundary as far as the Ganges, where it crosses the river near the Balawalı station. Through Kiratpur runs a road from Bijnor to Najibabad, while other unmetalled roads lead to Mandawar. Akbarabad and Nihtaur. The north-west of the pargana is traversed by the roads from Nagal to Mandawar and Balawali.

Kiratpur is an old pargana, and was known by this name in the days of Akbar, when it was held chiefly by Jats and Tagas. Since that time it has increased slightly in size, but has undergone no important changes.

KOT QADIR, pargana BARHAPURA, tahsil NAGINA.

A large village standing in 29° 36′ N. and 78° 27′ E., at a distance of 11 miles north from Nagina and 29 miles from the district headquarters. It stands about a mile and a half from the headworks of the Nagina canal and the banks of the Khoh river, and through it runs an unmetalled road from Nagina to Kotdwara, which is here joined by a similar road from Najibabad, the latter place being eight miles to the west. The village is shown in the revenue records as Haji Muhammadpur, but derives its name of Kot Qadir from Ghulam Qadir Khan of Najibabad. In 1872 it contained a population of 2,606 persons, and this rose in 1891 to 2,725. At the last census the number of inhabitants was 2,656, of whom 1,258 were Musalmans, mainly of the Julahacaste. There was formerly a police outpost here, but this has been

abolished, and the village now contains a lower primary school, a post-office and a cattle-pound. A small market is held here weekly, but the trade is merely local and unimportant. The village has an area of 233 acres, of which about 165 are cultivated, and is held by Saiyids at a revenue of Rs. 440.

MANDAWAR, pargana Mandawar, tuhsil Bijnor.

This ancient town, which gives its name to a pargana of the Bijnor tahsil, stands on the high ground overlooking the Malin valley to the south, in 29° 29' N. and 78° 8' E., at a distance of nearly nine miles north from the district headquarters. Through it runs a road from Bijnor to Chandok railway station and Nagal. and this is crossed by a second road leading from Kiratpur on the east to the Raoli ferry over the Ganges on the south-west. town is fairly compact, and is almost surrounded with mango groves, and its raised site, built as it is on the débris of former houses, renders it well drained and healthy. The population has, however, steadily declined during the past half-century. 1847 the number of inhabitants was 6,881, and this rose to 7,737 in 1853; but from that time it decreased, amounting in 1865 to 7,626, in 1872 to 7,622, and in 1881 to 7,125. There was a slight recovery in the next ten years, the total in 1891 being 7,346; but the downward tendency was again observed in 1901, when the place contained 7,210 persons, of whom 4,666 were Musalmans, 2,378 Hindus, and 166 of other religions, chiefly Christians and Aryas.

The trade of Mandawar is unimportant, and at the markets which are held twice weekly in the principal bazar the only business is in agricultural produce and the necessaries of life required by the people of the neighbouring villages. There are no manufactures, with the exception of small articles, such as boxes, pentrays, and paperknives, in pupier-maché, similar to that of Budauñ; they are of some artistic merit, but are neither well known nor in great demand. The place possesses a police-station, a post-office, a cattle-pound, an upper primary school, three aided achools for boys, and a small aided girls' school. Fairs are held here in honour of Debi in Chait and Kuar, of Zahir Diwan in Bhadon, and of Bale Salar in Chait; but none is of any importance. The town lands cover 863 acres, of which 140 acres are

comprised in the *chaukidari* area, and some 500 acres are under cultivation: the revenue is Rs. 1,586, and the proprietors are partly Sheikhs and Saiyids holding in *zamindari* tenure, and partly *bhaiyachara* communities of Rawas and Bishnois.

Since 1865 the town has been administered under Act XX of 1856. There were 1,702 houses in 1906, and of these 932 were assessed for the purposes of the house-tax, the income from which in the three preceding years averaged Rs. 1,216, giving an incidence of Re. 1-6-1 per assessed house and Re. 0-2-10 per head of population. The total receipts for the same period were Rs. 1,423 annually, including the opening balance, and the average expenditure Rs. 1,236; the principal items being Rs. 595 for the maintenance of the local police, Rs. 322 for the conservancy staff, and Rs. 164 for minor improvements.

The great antiquity of Mandawar is indubitable. The oldest part of the site is a raised mound to the south-east, about half a mile square. This is now covered by modern buildings, but the presence of large bricks in every direction proves that it was inhabited at a very early date. In the middle of this mound, which is about ten feet above the rest of the town, is a ruined fort, some 300 feet square and rising to a height of six or seven feet above the general level. In the south-east corner of the fort stands the Jami Masjid, built of large blocks of grey sandstone. This is said to have been constructed from the materials of a former Hindu temple, and such may well be the case, as many of the stones exhibit cramp-holes on their outer face; but nothing is known of the author or the date of the existing structure. History relates that the ancient town fell into decay and became a heap of ruins in the midst of forest, and that it was repeopled in the twelfth century by Agarwal Banias from Murari in Meerut. named Dwarka Das and Katar Mal, whose descendants are still the principal inhabitants. There is the usual tradition that the place was formerly included in the dominions of Prithvi Raj, the Chauhan ruler of Dehli, and that it was captured in 1193 by Shahab-ud-din, but though it certainly came under the sway of the Musalmans not long after, there is no reference to Mandawar in any of the extant chronicles of that period. It was no doubt visited by Timur in his famous raid, but thereafter the place

never rose to prominence till the beginning of the nineteenth century, when it was sacked by Amir Khan Pindari and his free-booters, while again during the mutiny the town suffered much at the hands of the Jat marauders of the neighbourhood. At the present time it is a place of mean appearance, built mainly of mud, and possessing no striking edifices and but few brick houses, the chief being that of the Agarwals.

The archæological interest of Mandawar is, however considerable, and the ancient site has been the subject of much speculation, though it has never been scientifically explored. Both St. Martin and General Cunningham identified the name with the Mo-ti-pu-lo of the Chinese traveller Hiuen Tsang, who visited the place in the seventh century and found it the capital of a Sudra kingdom. The town was famous for the monastery and stupa of the Buddhist teacher Sanghabhadia, who flourished about the beginning of the Christian era, and was the burnal place of his pupil, Vimala Mitra, whose stupa stood in a mango grove hard by. The neighbourhood was also enriched with many other doctors of the Hinayana or "Lesser Vehicle", and it seems that Mo-tipu-lo was a great stronghold of that sect. General Cunningham made an attempt to fit the description given by Hiuen Tsang with the existing features of the place. There is a second large mound occupied by the village of Mundia, about a mile to the north-east of the fort, and in between is a large tank called the Kunda Tal, surrounded by numerous small mounds. These he considered to be the remains of a single town with a circuit of some three and a half miles, and lying to the north-west of the Pirwali Tal, a deep and irregularly shaped sheet of water, forming part of a drainage line lealing into the Malin. This the General concluded to be the ditch formed by the earthquake which occurred at the death of Vimala Mitra, whose tomb he locates in the ancient mango grove on its western bank. The monastery of Gunaprabha, another schismatic professor, he places in the hamlet of Lalpur, which is built partly of ancient bricks and stands on a mound about three-quarters of a mile south-south-cast from the fort. North of Lalpur and half a mile from the mosque is the shrine of one Hidayat

Shah, and this, too, is constructed from the remains of an old building. Here Cunningham places the monastery of Sanghabhadra, while the stupa of the same name he supposed to be represented by another small Musalman shrine about 200 yards to the north-west. These identifications are necessarily conjectural, but it is probable that much might be effected by an excavation of the site.

MANDAWAR pargana, tahsil Bijnor.

Mandawar is the northernmost of the five parganas that make up the Bijnor tahsil. It is bounded on the south by pargana Bijnor, on the east by Kiratpur, and on the north and west by the Ganges, separating it from the Muzaffarnagar district. Owing to the large amount of land subject to fluvial action, the area is liable to change from time to time. The river has a general tendency to cut eastwards, so as to transfer land to the Muzaffarnagar side; several villages have at different periods been made over to that district, but the deep stream is not invariably the revenue boundary, and in some cases land on the west bank belongs to Bijnor, as the owners live on this side and own other villages in this district. The average area for the five years enling in 1903 was 65,823 acres or nearly 103 square miles, the permanent portion being only 47,847 acres.

The low alluvial land is a fairly level tract of loam and clay, of comparatively recent origin, and though always subject to injury from the annual floods, capable of bearing good crops in favourable years. Much damage was done in the wet cycle that terminated in 1895, when many villages were washed out of existence, and a large area of valuable land was rendered sterile by saturation and the saline efflorescence known as reh. Along the eastern edge of the khadir runs a small stream called the Lahpi, probably representing an old bed of the Ganges, and this is joined by one or two abandoned channels, which only carry water in time of flood. The Lahpi eventually empties itself into a great marsh or lake known as the Raoli jhil, though it actually lies at some distance from the village of that name. In former days this marsh was famous for the production of the fine rice known as munji, but the use in the water level has thrown

almost the whole area out of cultivation. The overflow from the jhil passes into the Malin, just before the confluence of that river with the Ganges on the southern boundary of the pargana.

The Malin barely touches Mandawar at any point in its course till it debouches into the low *khadir* in the south, but a considerable area to the south-east is included in its basin. This tract has the same general characteristics as in Kiratpur and Bijnor, being a level terrace of excellent alluvial loam and clay in a very high state of cultivation, and possessing sufficient natural moisture to render irrigation unnecessary. As elsewhere along this river, the tillage is almost wholly in the hands of Rawas, and from this fact the tract is locally known as Rawapuri.

The rest of the pargana comprises the uplands, which rise gradually from the Malin valley on the south and east, and are separated from the Ganges khadur by a fairly steep and well defined cliff above the Lahpi. The country resembles the corresponding circles of Bijnor and Daranagar, having an uneven surface marked by undulating ridges of poor sandy soil, which in the intervening valleys, and by dint of constant cultivation, passes into a fair loam. The edges of the tract are scored by ravines, but otherwise there is little unculturable land except on the actual sandhills. The crops are inferior, and long fallows are necessary, while the population is sparse and irrigation is practically unknown; though water is found at no great depth below the surface, wells are difficult to construct, and consequently the villages depend entirely on good and seasonable rains.

Under such conditions it is only natural that the development of the pargana should have reached but a moderately high standard. In 1835 the cultivated area was but 31,474 acres, and thirty years later the total had risen to 40,383 acres, though the increase was in part due to the inclusion of revenue-free lands that had been hitherto omitted. For the five years ending in 1906 the average was 43,469 acres or 66 per cent. of the whole, the improvement being very satisfactory in view of the deteriorated condition of the khadir. There had also been a marked expansion of the double-cropped area, which averaged 12.8 per cent. of the net cultivation. The land returned as barren amounts to 11,263 acres, but of this 2,450 acres are covered

with water and 2,673 acres occupied by village sites, roads, and the like; the remainder is, however, more extensive than in any other pargana of the district, and the large proportion of unculturable waste is a fair index of the capabilities of the tract. They are further illustrated by an analysis of the soils, as classified at the last settlement: 42.5 per cent. is loam, 9 per cent. clay, and all the remainder bhur or bhur sawar, the last two being even more prevalent than in pargana Bijnor. The so-called culturable area aggregates 11,091 acres or 16.9 per cent. of the whole; but this includes groves, 475 acres, and new fallow and land prepared for sugarcane, 4,646 acres, as well as old fallow and culturable waste proper. Some extension of tillage is possible, but it is certain that much of the land shown as available is too poor to yield a profitable outturn.

Irrigation is almost unknown in ordinary years, the total average being but 151 acres, or less than that of any other pargana save Kıratpur. This small amount is devoted to garden crops, for in the Malin valley and the khadir none is required, while in the bangar none is obtainable. The crop returns show a marked deficiency of the more valuable staples, though there has been a distinct improvement of late years in this respect. In the kharif harvest, which averages 28,468 acres as compared with a rabi area of 20,493 acres, 31.3 per cent. is occupied by bujra and arhar in combination, 247 per cent. by rice, 16.4 per cent. by sugarcane, and the rest by the pulses, cotton, maize, coarse millets and juar grown for folder. In the rabi 52.2 per cent. is taken up by barley, either sown alone or mixed with gram and wheat, 31.9 per cent. by wheat, and 7.7 per cent. by The amount of wheat has immensely increased, to the great advantage of the tract, but the predominance of barley is almost as marked as in the centre and south of the tahsil.

The pargana possesses a fine body of cultivators, consisting principally of Jats and Rawas, after whom come Chauhans Chamars, Sainis, Sheikhs and Gujars. In 1906 the area recorded in holdings was 47,599 acres, and of this only 65 per cent. was cultivated by proprietors, occupancy tenants holding 295, and tenants-at-will 63·1 per cent., the small remainder being ex-proprietary cultivation or rent-free. More than half the pargana

is still held on grain rents, while the cash rates vary greatly throughout the tract, being very much higher in the Malin valley than elsewhere. At the present time the average is Rs. 4-4-3 per acre for occupancy tenants and Rs. 5-3-9 for tenants-at-will, while shikmis, who hold about three per cent. of the area, pay Rs. 5-12-3. Details of the revenue demand at the various settlements will be found in the appendix. At the last revision an enhancement of about 27 per cent. was taken, but in spite of this the incidence is extremely low as compared with the rest of the district, this being only natural in view of the characteristics of the tract.* The total demand varies from time to time by reason of the numerous alluvial mahals, 68 in all, which were last assessed in 1904 at Rs. 9,551.

The 165 villages of the pargana are at present divided into 439 mahals, of which 138 are held in single, and 255 in joint zamindari tenure, 28 are perfect, and nine imperfect pattidari, and the remaining nine are bhaiyachara. The proprietors are chiefly Banias, Bishnois, Sheikhs, Jats, Brahmans and Tagas. The principal resident landowners are the Bishnois of Muhammalpur, and the Banias and Brahmans of Mandawar. The Jats of Sahanpur own a considerable estate, and several villages belong to the Haldaur family and to the Muftis of Kiratpur. The pargana is said to have been re-settled by Agarwal Banias at a very early date, and the possessions of this caste are by no means of recent origin, though they have in many cases acquired the lands till lately held by Jats, Kayasths and Chauhans.

The population has fluctuated repeatedly during the past half century. In 1853 it numbered 38,707 souls, and this dropped to 35,873 in 1865, only to rise in 1872 to 37,962; it again fell in 1881 to 35,999, but rose ten years later to 40,185. At the last census in 1901 the pargana contained 39,318 inhabitants, of whom 18,964 were females. The total included 28,338 Hindus, 9,320 Musalmans, and 1,660 others, chiefly members of the Arya Samaj. The only town is Mandawar, and besides this Muhammadpur is a considerable village and has been separately described; two other villages, Indarpur and Muqimpur, contain

^{*}Appendix, tables IX and X.

more than a thousand inhabitants. Means of communication are distinctly poor as compared with the rest of the district. The railway skirts the extreme northern border, with stations at Chandok and Balawali; but the few roads are of an inferior description, and comprise those from Bijnor to Mandawar and Nagal, and from Kiratpur to Mandawar and Raoli ferry over the Ganges.

The pargana has little history of its own. It was known by its present name in the days of Akbar, when the *camindars* were shown as Bais, though this is probably a corruption for Vaish or Banias. With the rest of the district it passed into the hands of the Rohillas in 1748, from the Rohillas to the Nawab Wazir in 1774, and from the Nawab Wazir to the British in 1801.

MEMON, pargana Kiratpur, tahsil Najibabad.

A large agricultural village on the eastern borders of the pargana, standing in 29° 32′ N. and 78° 16′ E., a mile east of the unmetalled road from Bijnor to Najibabad, six miles southwest from the latter, and 15 miles from the district headquarters. The village lands extend westwards from the Chhoiya river, which forms the boundary of the pargana, and cover an area of 1,048 acres, of which some 900 acres are cultivated; the revenue is Rs. 2,030, and the proprietors are Saiyids holding in bhuyachara tenure; in addition to this village, they own a considerable property in the pargana. The place possesses a post-office and an upper primary school, but is otherwise unimportant; the population at the last census numbered 1,743 persons, of whom 1,243 were Musalmans.

Adjoining Memon on the west is the larger village of Banehra, which in 1901 contained 2,582 inhabitants, including 1,561 Musalmans. It contains an upper primary school and a small bazar in which markets are held weekly.

MORDHAJ, pargana and tahsil Najibabad.

This is the name commonly given to a small but ancient ruined fort, standing in 29° 40′ N. and 78° 26′ E., on the east side of the road leading from Najibabad to Kotdwara, at a distance of six miles north-east from the tahsil headquarters. It

is situated in the village of Chandanwala, and is shown in the maps as fort Munawwar Jor. There can be no doubt that the site is very ancient, and the whole country round for several miles is covered with traces of ruined buildings, apparently representing a large city of former days. The fort itself is of irregular shape, built on a mound overgrown with jungle. The walls, however, can still be traced, rising to a height of about 15 feet, and enclosing a space some 800 feet and 625 feet wide; they are surrounded by a ditch with a breadth of 60 feet, beyond which is an outer rampart, while the entrance is on the eastern side. The remains consist principally of large bricks of the old pattern, but it is said that the stones of the place were carried away to build Patthargarh near Najibabad, and the figures of gods and goddesses are believed to have furnished all the temples of that town. Within the fort, towards the middle of the eastern side. is a large mound, locally known by the name of Shigri, and this has been conjectured to be a Buddhist stupa, though no proper excavation has as yet been attempted. Nothing is known of the history of the fort and city, but the name Mordhaj is presumably derived from Mayura Dhvaja, meaning the peacock standard which is apparently the title of the founder. In Oudh he himself, and in Bijnor his son, Pita Dhvaja, is described as a contemporary of the Pandavas, while according to another tradition he was the Jain antagonist of Saiyid Salar Masaud, who fell at Bahraich.

MUHAMMADPUR, parguna Mandawar, tahsal Bijnor.

This village, officially known as Muhammadpur Deomal, stands in 29° 27" N. and 78° 8' E., at a distance of two miles south-west from Mandawar and six miles from Bijnor, on the road leading from the former place to Raoli ferry over the Ganges. It is an old Jat settlement, but is no longer held by this caste, the proprietors being Bishnois, who pay a revenue of Rs. 1,430; the total area is 601 acres, of which some 430 acres are cultivated. These Bishnois have an extensive money-lending business, and are people of much wealth, being now the largest proprietors in the pargana. The place figures in the Mutiny history of the district, owing to the disturbances that were created here at an early stage in the rebellion by the Jats and Gujars of the

neighbourhood. It possesses a branch post-office, a large and flourishing upper primary school, and a small weekly market. A considerable fair takes place here during March in honour of Zahir Diwan, and another gathering is held in the same month under the name of the Chhipis' fair. The population in 1901 numbered 2,042 souls, of whom 652 were Hindus, 346 Musalmans and no fewer than 1,044 of other religions, a few of them being Christians, but the majority belong to the Arya Samaj.

NAGAL, parguna and tahsil Najibabad.

A small market town in the extreme east of the pargana, standing in 29° 40' N. and 78° 12' E, on the high ground above the Ganges, which flows about a mile an l a half to the west of the main site. Through Nagal passes a road from Bijnor and Mandawar to join the Hardwai load near Sabalgarh, and a second leads from Najibalad to the Bhainsghat ferry over the Ganges, the distance from Bijnor being 22 miles, and that from the tahsil headquarters ten miles. Nagal is said to have been founded about 1605 by the first Rai of Sahanpui, and there is a handsome well in the town, dating from the days of Aurangab. It is still owned by the Jats, who pay a revenue of Rs. 1,500, on a total area of 1,785 acres, of which about 630 acres are cultivated. The population in 1901 numbered 2,387 persons, of whom 556 were Musalmans. The place possesses a police-station, a post-office, a cattle-pound, and an upper primary school. Markets are held weekly in the bazar, but the trade is small. A large bathing fair takes place annually in Kartik at Goela, an a ljoining village to the south-west, at the point where the Ganges first becomes navigable.

NAGINA, pargana and tihsil NAGINA.

Nagina, though no longer the capital is the principal town of the district, and stands in 29° 26′ N. and 78° 26′ E., at a distance of 19 miles from Bijnor, with which it is connected by a metalled road. Through the town runs the road from Moradabad to Najibabad and Hardwar, while others radiate in various directions, leading to Kiratpur, Nihtaur, Sherkot, Afzalgarh and Kashipur, and Barhapura. The main line of the Oudh and Rohilkhand railway passes the town on the west, the station being some

half a mile from the main site to the south-west, and approached by a metalled feeder road.

Nothing is known of the foundation of the place, but it appears at all times to have been a Musalman town, and the name itself is of Persian origin, denoting the jewel in a ring. Though it does not figure in history, it had become of sufficient importance by the days of Akbar to give its name to a pargana; but it does not seem to have risen to any prominence till the days of Rohilla supremacy, when the old fort was built. To the same period may be assigned several of the small though elegant mosques; but the Jami Masjid, which is a conspicuous building on an elevated and well chosen site, was erected little more than forty years ago. In 1805 the town was sacked by the Pindaiis under Amir Khan, as mentioned in the history of the district. Nagina has been the headquarters of a tahsil since the introduction of the British rule, and in 1817 was selected as the seat of the newly appointed collector of northern Moradabad. The change to Bijnor took place a few years later in 1824, one of the reasons being that the drainage of the place is somewhat deficient and malaria is always prevalent. The town still suffers from the same cause, and although there has been a considerable improvement of late years, is never very healthy. During the mutiny Nagina was the scene of several conflicts between the rival parties, and in the near vicinity the Musalmans received their final defeat at the hands of General Jones, which crushed the rising in Bijnor.

At the first census in 1847 the population was 14,001 and though the total dropped in 1853 to 13,462, subsequent years have witnessed a very rapid increase. From 19,075 in 1865 it rose to 19,676 in 1872, and to 20,503 in 1881, while ten years later it was 22,150. At the last census in 1901 the number of inhabitants was 21,412, of whom 10,801 were females. Classified according to religions, there were 14,887 Musalmans, 5,524 Hindus, 393 Aryas, 346 Sikhs, 229 Christians and 33 Jains.

The town is essentially Musalman in appearance, and is a large and busy settlement of brick houses surrounded by suburbs of mud huts, while sprinkled among the buildings are several open spaces shaded by fine trees. The streets are for the most part paved with brick, and the principal bazar is a largely

frequented thoroughfare with good shops on either side. The place is the chief commercial centre in the district, and a large trade is carried on in sugar, rice, cotton and other articles. Nagina has long been celebrated for its iron work, and in former days the matchlocks produced here had a wide reputation. The special industries are now wood-carving in ebony, which has been already described in chapter II, and the manufacture of glass phials, used by pilgrims from all parts of India to convey the sacred water of the Ganges from Hardwar. The glass is of greenish brown colour, and is made from an amalgam of reh and saltpetre. Among other products of the place may be mentioned cotton cloth of the kinds known as garha and gazi, hempen sacking and ropes, as well as lacquered and painted goods produced in small quantities.

The chief public buildings of Nagina comprise the old Pathan fort, in which the tahsil and registration office are located; the dispensary, a fine brick structure standing on a raised and open site in the south-eastern outskirts of the town, on land confiscated after the mutiny, a first class police-station, a post-office, a cattle-pound, and a large middle vernacular school. A primary school is maintained by the municipality, which also gives grants-in-aid to eight other schools, one of these being for girls. To the east of the town, between the main site and the railway station, flows the Nagina canal, close to which is a small inspection bungalow.

The town has been administered as a municipality since 1866, and the board consists of twelve members, of whom nine are elected and three appointed by Government. The income is derived mainly from the usual octroi tax on imports, the only other items of any importance being the receipts from the cattle-pound and the sale of manure. Details of the annual income and expenditure for each year since 1891 will be found in the appendix.* Several large and influential landowners reside in Nagina, the principal families being those at present represented by Mir Al-i-Ali, a Saiyid who has extensive estates in this pargana and Barhapura; Dalip Singh, the head of the Jat Chaudhris; Sahu Bisheshar Nath, the chief member of a flourishing firm of bankers; and Lala Makhan Lal, another Bania, who holds five villages and

^{*} Appendix, table XVI.

shares in five others in the Nagina pargana. A bench of four honorary magistrates sits in the town, for the trial of petty criminal cases arising within municipal limits.

NAGINA parguna, tahsil NAGINA.

This pargana forms the western portion of the tahsil, being bounded on the east by Barhapura, the dividing line for the most part being the Khoh river; to the north lies pargana Najibabad, to the west Akbarabad and Bijnor, and to the south Nihtaur and Dhampur. The total area is 62,700 acres or nearly 98 square miles.

The pargana lies in the very centre of the district, and is a tract of great natural fertility, though somewhat diversified in its physical characteristics. The eastern portion, comprising about one-third of the whole, consists of the low alluvial khadir of the Khoh. a river which flows in a wide sandy bed, full of quicksands. rendering its passage difficult and dangerous except at a few wellknown places. Owing to the heavy floods by which the river is swollen from time to time, the villages on its banks are in some measure precarious, and a large number of them are treated as alluvial, but further inland the cultivation is fairly stable. broad khadur terminates in a well defined bank, along the crest of which runs the road from Moradabad to Hardwar, passing through the town of Nagina. The upland tract is to some extent uniform, but is subdivided into two portions by the Gangan river, which flows from north to south in a deep bed. The land to the east of the stream is far richer than that to the west, though the advantage is mainly due to the existence of canal irrigation. To the west the land lies higher, there are no canals, and in many places wells are difficult to construct, although water is found at no great distance from the surface. Besides the Gangan, several other streams are included in the drainage system. One of these is the Karula, which takes its rise close to the Nagina railway station, and flows southwards through the eastern uplands. In the north-west is the Pilkhala, a small tributary of the Gangan, which for a short distance separates this pargana from Najibabad, and further south another insignificant stream joins the Gangan on the left bank, a mile above the bridge on the Bijnor road. Through the south-west portion flows the Ban with its several

minor branches, the chief of which is the Banra, forming the boundary between Nagina and Bijnor. The Ban is at times liable to flooding, but owing to the depths of its channel does little damage to the land in its neighbourhood. The effects of flooding are in fact only to be seen in the *khadur*, where not only the Khoh, but also its small tributaries, such as the Paodhoi and the Budhi, are apt to inundate the villages on their banks in years of heavy rainfall. According to the soil classification of the last settlement no less than 58 per cent. of the entire pargana is a good loam, while 30 per cent. is shown as clay, and only 11 per cent. as sandy or inferior loam, the *bhur* soils of the western parganas being here practically unknown.

In former days Nagina suffered to some extent from overassessment, probably owing to the fact of its inherent richness. In 1836 cultivated area was 39,229 acres, and this rose to 43,713 acres at the survey of 1865, though the increase was partially due to the resumption of revenue-free lands, which had formerly been omitted. During the currency of the tenth settlement, the extension of cultivation was very small, amounting to only 2.38 per cent.; in the better lands the area was almost stationary, but there had been a marked improvement in the western uplands, though on the other hand the khadir had deteriorated. Since the settlement the development of the pargana has been more rapid, for during the five years ending in 1906 the average area under the plough was 46,378 acres or 73.9 per cent. of the whole. The introduction of the canal is partially responsible for this, and is certainly the cause of the large increase in the double-croppe l area, which now averages 9,409 acres or 20.3 per cent. of the cultivation. Of the remainder, 7,122 acres or 11.4 per cent. are shown as barren, and 9,200 acres or 14.7 per cent. as culturable, but both these figures are in some measure deceptive, as of the former 2,648 acres are covered with water and 3,045 acres occupied by village sites, buildings and roads, leaving only 1,430 acres as unfit for cultivation; while of the latter 1,010 acres are under groves and 2,750 acres are current fallow, so that only 5,440 acres remained as culturable waste and old fallow, the proportion being too small to admit of much further extension, except perhaps in the more or less precarious villages of the khadir. The average irrigated area is 7,425 acres or 16 per cent. of the cultivation, and this figure is only exceeded in pargana Burhpur. No less than 6,820 acres are watered from the canals, the other sources of supply being but seldom utilised. Wells are unusually scarce, and there are no tanks of any size or importance, with the possible exceptions of that near Banwaripur. The canal system has already been described in chapter II, and its importance may be estimated from the fact that in 1870 the area thus irrigated was only 1,390 acres.

As is generally the case in this district, the *kharij* harvest very largely exceeds the *rabi* in point of area, the former averaging 35,763, and the latter 19,869 acres. Rice is the great staple, amounting to 56·1 per cent. of the *kharif* area, and next comes sugarcane with 20 per cent., an extraordinarily high proportion. The remainder of the harvest consists chiefly in cotton, 6·1 per cent. and the coarser pulses and millets; there is a small but increasing amount of maize, and in the higher lands to the west *bajra* is not uncommonly grown. The principal *rabi* crop is wheat, which by itself constitutes 43·1 per cent. of the area sown. It is followed by barley, either grown alone or in combination, with 25 per cent., and gram with 13·7 per cent., the rest being chiefly oilseeds, *masur* and garden crops.

The standard of husbandry is very high, and is probably not surpassed in any other part of the district. The cultivators are mainly Chauhans and Jats, and after them come Sainis, Chamars, Sheikhs, Tagas and Brahmans. The total area included in holdings in 1906 was 49,210 acres, and of this 12.8 per cent. was in the hands of proprietors, either as sur or khudkasht, 36.1 per cent. was held by tenants with rights of occupancy, and 50 per cent. by tenants-at-will, the remainder being either rent-free or in the possession of ex-proprietors. Cash rents prevail over about two-thirds of the area, and vary according to the nature of the land. On an average they are higher than in any other part of the district, occupancy tenants paying Rs. 7-4-7 per acre, and tenants-at-will Rs. 9-5-1: the area sublet is 4.4 per cent. of the whole and this seldom includes the best land, the average rental being Rs. 8-6-4 per acre. The revenue demand at successive

settlements will be found in the appendix.* At the last revision in 1902 only a small enhancement was taken, amounting to 6.6 per cent. on the expiring revenue, but the incidence is higher than in any other pargana.† There are 51 mahals on the alluvial register, last assessed in 1906 at Rs. 3,355.

The pargana contains in all 302 villages, at present divided into 580 mahals. Of the latter, 216 are owned by single proprietors, 237 are joint zamindari, 47 are bhayachara, 41 are imperfect pattidari, and 27 are held in the perfect form of the same tenure, while the remaining 12 are revenue-free. The proprietors are mainly Saiyids, Rajputs, Sheikhs, Tagas, Jats and Banias, while Chauhans and Bishnois own small estates. The largest landholder is Mir Al-i-Ali, the head of a wealthy Saivid family of Nagina, who has 18 villages and seven mahals assessed at Rs. 10.876. Next comes Kunwar Digbijai Singh of the Taga family with 19 villages paying Rs. 9,370, the Raja of Kashipur with eight villages, the Jat Chaudhris of Nagina with six villages and four mahals, Sahu Bisheshar Nath of Nagina with tenvillages and five mahals, Lala Makhan Lal, another Bania, withthree villages and five mahals, and Raja Harbans Singh of Haldaur with three villages. The Banias have largely increased their estates of late years, chiefly at the expense of Pathans and other Musalmans. The Saiyids of Pitanheri at one time owned a great number of villages, but have been steadily losing ground for many years.

The population of the pargana has risen rapidly since 1853, when it numbered 61,178 souls. The total was 69,681 in 1865, and 74,708 in 1872; and though it dropped in 1881 to 71,569, ten years later it was 79,234, giving a density of 784 persons to the square mile. At the last census of 1901 the pargana contained 77,528 inhabitants, of whom 37,366 were females. Classified by religions, there were 43,969 Hindus, 32,389 Musalmans, and 1,170 others, chiefly Aryas, Christians and Jains. The only town is Nagina itself, and few of the villages have large population, the chief being Hargampur and Raipur Sadat. The tract is well supplied with means of communication, being traversed from south to north by the railway, with stations at Puraini,

^{*} Appendix, table IX | † Appendix, table X.

Nagina and Bundki. A metalled road connects Nagina with Bijnor, and through the town passes that from Moradabad to Najibabad. Other roads lead to Sherkot, Afzalgarh, Barhapura, Kotdwara, Kiratpur and Nihtaur, while the western portion is served by the roads from Nihtaur to Kiratpur and Najibabad.

The pargana has undergone practically no change since the days of Akbar, when it was one of the subdivisions of the Sambhal sarkar. In 1802 the area was largely increased by the addition of Islamabad, but the constitution of Barhapura in 1844 reduced it to its original size.

NAGINA tahsil.

This is the eastern subdivision of the district, and comprises an irregularly shaped tract of country, extending westwards from the Phika river, which generally forms the boundary between this district and those of Naini Tal and Moradabad, to the borders of the Najibabad and Bijnor tahsils. To the south lie the Nihtaur and Dhampur parganas of the Dhampur tahsil, and on the north the boundary runs along the submontane road, which now belongs to Garhwal. The tahsil contains the three parganas of Nagina, Barhapura and Afzalgarh, each of which has been separately described: the total area is 290,188 acres or 453.4 square miles.

It its physical aspects the country presents widely different characteristics. All along the northern border runs a belt of forest, continually decreasing in area with the spread of cultivation, except in the extreme east, where the Rehar reserved forest extends southwards for several miles. This tract resembles in some degree the Bhabar of Naini Tal, and is drained by the Khoh, Ramganga, Phika and many tributary streams, most of which are hill torrents, dry for a large portion of the year, but swollen to a considerable volume during the rains. South of the forest lies a low alluvial belt of varying character, highly cultivated in the south, but subject in the north to recurring periods of acute depression. West of the Khoh the level rises, pargana Nagina being included in the eastern uplands, a densely populated and well developed stretch of country, with a fertile soil and a fairly complete system of canals. The south-western corner of Nagina

extends into the central uplands, which are drained by the Ban and Gangan, and have a heavier soil, admirably suited for the growth of late rice.

The difference between pargana Nagma and the rest of the tabsil is further exemplified in the matter of communications. The former is traversed by the railway, with stations at Puraini. Nagina and Bundki, and also possesses a number of good roads. the chief of which is the metalled road from Nagina to Bijnor, while others lead from Nagina to Kiratpur, Najibabad, Nihtaur and Moradabad, the south-western portion being further served by those from Nihtaur to Kiratpur and Najibabad. East of Nagina, however, roads are few and indifferent, and access to this remote tract is rendered more difficult by the presence of the many rivers and streams. One road leads from Nagina to Kashipur, crossed at Afzalgarh by that from Dhampur to Kalagarh on the Garhwal border, and giving off a branch from Rehar to Dharamandi; a second goes to Barhapura and Kalu Shahid; a third runs from Najibabad to Barhapura and Kalagarh, and a fourth connects Bundkı station with Kot Qadir and Kotdwara. The rivers are crossed by ferries, of which a list will be found in the appendix, while the position of the roads is shown on the map.

The only important town in the tahsil is the municipality of Nagina. Act XX of 1856 is in force at Afzalgaih, and was formerly applied to Barhapura, Qasimpur Garhi, and Rehar, which with Kot Qadir may be described as small market towns with no manufactures and few points of interest. Mention of the larger villages has been made in the various pargana articles. The schools, markets, fairs, and post-offices of the tahsil are shown in separate lists in the appendix.

The population increased steadily from the time of the first census to 1891. In 1853 the number of inhabitants was 140,496, rising to 161,762 in 1865, to 165,115 in 1872, to 170,075 in 1881, and to 183,147 ten years later. Then a decline set in, especially in the eastern portion. The enumeration of 1901 showed a total of only 156,898, of whom 74,683 were females. This decrease clearly illustrated the general deterioration of Afzalgarh and Barhapura, which reached such a point that a revision of the revenue, accompanied by substantial reductions, was found necessary. Of the

total population, 96,295 were Hindus, 58,350 Musalmans, 874 Aryas, 1,014 Sikhs, 291 Christians and 74 Jains. The principal Hindu castes are Chamars, numbering 25,047; Rajputs, 20,268, of whom 19,766 were recorded as Chauhans; Jats, 6,028; and Sainis, 5,372. Then come Malis, Brahmans, Gadariyas, Kahars, Banias, Barhais and Kumhars, all occurring in numbers exceeding two thousand. Among the Musalmans Julahas largely preponderate with a total of 16,856, and they are followed by Sheikhs, 9,514, Telis, 3,441, Saiyids, Faqirs, Behnas, Pathans, Dhobis and Jhojhas.

Only 44 per cent. of the population were returned as actually dependent on agriculture, though this does not include the many persons who are engaged in cultivation as a subsidiary means of subsistence. Nearly 11 per cent. are occupied in the manufacture of cotton cloth and similar fabrics, ten per cent. in general labour, six per cent. in the supply of food and drink, and next come workers in timber and other forest produce and those who derive their support from cattle-breeding and pasture. The number of mendicants was no less than 6,084, though even this figure was largely surpassed in Dhampur. The manufactures of Nagina are of considerable importance, the town being the chief industrial centre of the district.

The tahsil is administered as a subdivision in the charge of a full-powered joint magistrate or deputy collector. The tahsildar is stationed at Nagina, where also is the court of the munsif, whose jurisdiction includes the whole tahsil. There is a bench of four honorary magistrates at Nagina, but only for the trial of cases occurring within the municipality. For police purposes there are stations at Nagina, Barhapura, Afzalgarh and Rehar, the circles of which in the case of the two first are conterminous with the parganas of the same name, while in future there will also be a single thana for Afzalgarh, as it is proposed to abolish that in existence at Rehar and to form the entire area into a single charge.

NAJIBABAD, pargana and tahsil Najibabad.

The place which gives it; name to the pargana and tahsil is a large town standing in 29° 37′ N. and 78° 21′ E., at an elevation of about 875 feet above the level of the sea, and at a distance

of 21 miles north-east from Bijnor. It is connected by unmetalled roads with Bijnor on the south-west, Nihtaur on the south, Nagina on the south-east, Kot Qadir on the east, Kotdwara on the north-east, and Hardwar on the north-west, while from the last a branch goes to Nagal, taking off a short distance beyond Sahanpur. The main line of the Oudh and Rohilkhand Railway passes to the south of the town, the station being half a mile from the main site, and from this point a branch line runs to Kotdwara, closely following the road to that place.

Along the north-eastern outskirts flows the Malin river. though most of the town stands high, well above the flood bank: but owing to the close proximity of the forest, which renders the rainfall very heavy, and perhaps also because of the large number of pilgrims who pass through Najibabad on their way to Hardwar, the place has the reputation of being unhealthy. The sanitary condition are, however, satisfactory, since the area is well drained by the many ravines and channels leading down to the river. The town is built mostly of mud, but there is a fair proportion of brick buildings. The chief bazar stands in the Munirganj and Bara Bazar muhallas, at the junction of the Bijnor and Nagina roads, and consists of a brick-paved square, in which markets are held three times a week. Najibabad is of considerable commercial importance, being a depôt between the upper Doab on one side and the hills on the other. The principal articles of commerce are cloth, salt, sugar, grain, timber and other forest produce. The manufactures of the place, which are mostly exported to the hills, include vessels of all kinds and metals, iron, copper, bell-metal and brass. Besides these, quantities of cotton cloth, both garha and gazi, blankets, shoes and other articles of personal or domestic use are made here. There is also a considerable manufacture of baskets woven from split bamboos, the commonest being the kawars in which pilgrims carry the Ganges water from Hardwar. The sweetmeats of Najıbabad too have a wide reputation, while the place is also known for its carts, and in former days was celebrated for the excellence of its matchlocks.

The town was founded in the days of Rohilla supremacy, and derives its name from Najib-ud-daula, who removed the head-quarters of the pargana hither from Jalalabad. He also built in

1755 the great fort of Patthargarh or Najafgarh, which stands about a mile and a half to the east. This building, now in ruins, is constructed of brick and stone, the latter having been taken. it is said, from the more ancient castle of Mordhaj. It is square in plan, and is surrounded by an embattled wall, with bastions at each angle; there are gateways on each side, the chief being that opening towards the town. Within are a few palm trees, and the remains of considerable buildings, half hidden among the jungle which has grown up. The tomb of Najib-ud-daula stands to the south of the town, while to the north is that of his brother. Jahangir Khan, which was constructed in 1173 H. The name of Natib-ud-daula's son is preserved in the muhalla of Zabitaganj, which comprises the eastern portion of the town. There are several other old buildings, the chief being the palace of the Nawabs in the north-eastern quarter. It is now used for the tahsil offices, but little remains of the former structure except the fine carved entrance and a small portion of the frontage. Within is a large court, where the dispensary, registration office and the police-station are also located. Opposite the gateway in the centre of the square are the remains of the Nawab's naubat-khana. and immediately to the north-east is a fine garden, which was laid out by Nawab Muin-ud-din, the grandson of Najib-ud-daula, and his nephew Jalal-ud-din. The garden contains a spacious building known as the Kothi Mubarak Bunyad, so called because a son was born to Jalal-ud-din on the day when he began to build it; the place is now used as a rest-house. In the Nawab-tola there is an old baradari, which is now in a ruinous condition, and the town also contains a number of mosques and other buildings of little architectural importance. The town was sacked by the Marathas in 1772, and in 1774 it passed into the hands of the Nawab Wazir of Oudh. Its importance then declined, and when Captain Hardwicke visited Najibabad in 1796, he found that it had already fallen into decay. Nawab Muin-ud-din Khan took up his residence here in 1801, after the cession of the district, and his son was Mahmud Khan, whose conduct in the Mutiny has been described in chapter V. When the town was reoccupied in 1858 the palace of the Nawab was destroyed, and the whole place was given up to plunder.

In addition to the public institutions already mentioned, Najibabad possesses a post-office, a cattle-pound, and a middle vernacular school. There are eight primary aided schools supported by the municipality, and two similar schools for girls. In addition to these there is an anglo-vernacular school teaching up to the middle standard, which was opened in July 1892, through Mission agency, and is known as the Bullock school; it is housed in a good masonry building which was erected by subscription, and is supported partly from private funds and partly from grants made both by the municipality and by Government.

The population of the town numbered 19,999 persons in 1853, but the two following enumerations witnessed a decline, the total dropping to 19,557 in 1865, and to 17,418 in 1872. Since that time it has steadily increased, the number reaching 17,750 in 1881, and 19,410 in 1891, while at the last census Najibabad contained 19,568 inhabitants, of whom 10,005 were females. Classified according to religions, there were 9,335 Hindus, 9,957 Musalmans, 207 Jains, 36 Christians, and 33 Aryas and Sikhs.

Since 1866 the town has been administered as a municipality, and its affairs are now managed by a board of eleven members, of whom ten are elected. The income is derived principally from an octroi tax on imports, and the only other receipts of importance are rents of houses and bazar dues, and the sums derived from the cattle-pound and the sale of manures. Details of the income and expenditure for each year since 1891 will be found in the appendix.*

NAJIBABAD pargana, tahsil Najibabad.

This is the largest of all the parganas of the district, and forms the northern portion of the Najıbabad tahsıl. It stretches northwards from the borders of Kiratpur, Akbarabad and Nagina to the submontane road which marks the boundary of Garhwal, and extends westwards from Barhapura to the river Ganges. The total area, which is liable to vary slightly from time to time on account of fluvial action, is 160,169 acres or 250 square miles.

^{*} Appendix, table XVI.

The greater part of the pargana consists of forest, which covers about 97,800 acres. This includes the reserved forest on and around the low hills of Chandi in the extreme north, 45,802 acres in extent, of which an account has been given in chapter I, as well as the large expanse of private forest stretching all along the northern border, and belonging mainly to the Jat family of Sahanpur. Much of the land has been reclaimed of late years, but the villages are mere clearings in the jungle and are exposed to the ravages of wild animals. The influence of the forest also affects the agricultural conditions of the des or open country, especially on its northern limits. There are in all 58 forest villages, 45 of which are part of the Sahanpur estate: in some there is fairly continuous cultivation by resident tenants, in others only tobacco is grown by cultivators who retire to their villages in the des during the rains, and in a good many there is no cultivation at all, the income consisting in grazing dues and the sale of forest produce.

Below the Chandi hills, the jungle belt is a country with an irregular surface, cut up by numerous streams and torrent beds, with large patches of open grass interspersed among the tree forest. -The soil is usually of a good quality, and yields a fairly abundant return when cultivated, though the lack of adequate protection is a great drawback. The rivers and streams of this tract have already been mentioned in chapter I. The Paili, Rawasan and Kotawali Rao join the Ganges within the forest area, but the others continue their course into the cultivated plains to the south, dividing them into several distinct portions. The northern limit of the des is a line drawn through Bhogpur and Bhaguwala, and terminating a short distance north of Nagal. the northern villages are more or less affected by the forest, the influence of which is seen in a heavy rainfall, enabling the fertile soil to obtain and retain an abundance of moisture, so as to preclude the necessity for artificial irrigation; while at the same time the climate is indifferent, the inroads of wild animals are extensive, and great labour has to be expended in keeping back the jungle. A marked improvement has, however, been effected of late years, and the natural disadvantages have been greatly reduced; population is on the increase, and the superior crops are grown far more extensively than was formerly the case.

Beginning from the west, the first tract of the open country is a narrow strip of alluvial land on the banks of the Ganges, with a fairly fertile soil but little cultivation. This terminates in a precipitous cliff from 50 to 80 feet in height, broken here and there by deep and irregular ravines known locally as kholas. From this high bank there stretches inland a broad plateau, with a loam and clay soil and a generally level surface. Irrigation is almost impossible here, owing to the great depth at which water is found, but there is none of the inferior sandy soil which characterises the adjoining portion of Kiratpur to the south, except in a few villages on the very border of that pargana. This upland tract extends as far as the Lakharhan and its tributaries, the Katra and Sukha nala, along which the ground is uneven and the soil somewhat sandy. Beyond the Lakharhan the level drops, and the country changes into a wide plain with a firm and rich soil of loam and clay, steadily improving in quality up to the town of Najibabad. This is traversed by the Malin and it branches. the Ratnal on the west and the Riwari on the east. The valley of the Malin is extremely rich, but the action of the river is more violent than in the parganas to the south, so that many of the villages on its banks have been brought on to the alluvial register. The cultivation is of a very fine description, the bulk of the tenants being Rawas and Sainis. Next to the Malin valley comes that of the Chhoiya, a small watercourse which rises at Samipur, and thence flows south-west along the boundary of the pargana to leave it at Bulchandpur. The country along its banks is of a poorer quality than that of the Malin tract, the soil being lighter and far less fertile; the stream is dry for the greater part of the year, and its floods are of small dimensions, so that the land is not enriched by any fertile deposit such as constantly renovates the soil of the Malin basin. In the extreme south-eastern corner of the pargana flow the Gangan and its small affluents, the Katheni and Pilkhala. The land here resembles the adjoining portion of pargana Nagina. lying very low, highly cultivated, and producing mainly rice. As a whole, the des is a rich country, its great natural fertility being enhanced by the presence of an unusually skilled body of cultivators; 51 per cent. of the soil is loam, 30 per cent.

clay, and the remainder the light soil known as bhur sawai, the area of true bhur being quite insignificant.

In 1835 there was hardly any cultivation in the forest tract, while that of the des amounted to 23,901 acres. At the tenth settlement the latter had risen to 35,942, while the figure for the whole pargana was 39,736 acres. The subsequent development has been remarkable, for during the five years ending in 1906 the average area under tillage was 53,502 acres or 33.4 per cent. of the entire pargana. The increase has been great everywhere, but especially in the forest tract, and it is impossible to say how far the process may be contained under fayourable circumstances. Of the remaining area, 90,402 acres were classed as culturable, and 16,265 acres as barren. The former includes practically all the forest and is therefore but a conventional term; there are 5,815 acres of new fallow and land prepared for sugarcane, and 721 acres under groves, the rest being shown as old fallow, 7,626 acres or culturable waste, 76,240 acres. Similarly the barren area comprises land covered with water, 8,058 acres, and that occupied by sites, buildings, roads, railways and the like, 4,309 acres; the remaining 3,899 acres are doubtless unfit for cultivation, but probably this amount is far short of the mark.

The kharif harvest averages 35,649 acres and the rabi 30,928 acres. The latter shows a very remarkable increase, mainly due to the greater frequency of double-cropping, which averages 22.5 per cent. of the net area under tillage, and in many years has far exceeded this figure. Rice comes first among the kharif staples, amounting to 45.5 per cent. of the harvest, and then cotton, 17.8 per cent The latter proportion is the highest in the district, the reason probably being that this crop is the least liable to damage by wild animals, and is consequently in favour in the forest villages. Sugarcane takes the third place with 13 5 per cent., the area having greatly expanded of late; the rest of the harvest consists in the coarse pulses and millets, juar grown as fodder, and bajra mixed with arharin the lighter soils. In the rabi the rapid spread of wheat is very significant, this crop now composing 50.6 per cent. of the area sown. Then follow barley, alone and in combination, with 132, gram with 10.8, and oilseeds, chiefly buln and sarson, with 128 per cent. Irrigation is seldom practised in the open country, though in the forest tract considerable areas are watered by damming the small streams, the Malin and Rawasan being freely utilised. On an average, 3,930 acres, or 7.5 per cent. of the cultivation, are irrigated, 2,573 acres being supplied by the rivers; wells are scarce, but in the country east of the Lakharhan they can be dug without difficulty if required, though in normal years they are used solely for garden crops.

The cultivators of the pargana are chiefly Jats, Chauhans, Chamars, Sainis, Sheikhs and Rawas, while many other castes are found in small numbers. The tract has thus the advantage of a first-rate body of tenants, the Sainis and Rawas being the best husbandmen in the district, while the Jats are little inferior; the Chauhans occur principally in the east, and though sometimes cultivators of a high order, are generally apathetic and unenterprising. In 1906 the total area included in holdings was 57,962 acres, and of this 8.2 per cent. was held by proprietors as sir or khudkasht, 2575 per cent. by occupancy tenants, and 65.4 per cent. by tenants-at-will. About half the area is held at cash rents, and the rates vary considerably according to the locality; they are highest in the valleys of the Malin and Gangan and lowest in the precarious forest villages and in the sandy tract adjoining Kiratpur. On an average tenants, whether with or without rights of occupancy, pay Rs. 4-11-8 per acre, this being generally below the district average. About 4.3 per cent. of the land is sublet, shikmi tenants paying Rs. 5-9-2. The revenue demand of the pargana at successive settlements will be found in the appendix.* At the last revision an enhancement of about 38 per cent. on the expiring demand was taken, but the incidence is by no means high, and much lower than in the rest of the tahsıl.† There are 16 alluvial mahals in the pargana, last assessed in 1903 at a revenue of Rs. 6,370.

There are altogether 239 villages in the pargana, at present divided into 362 mahals. Of the latter 98 are held in single, and 228 in joint zamindarı tenure; five are perfect, and 15 imperfect pattıdarı, eight are bharyachara, four are

^{*}Appendix, table IX | † Appendix, table X.

Government property, and four are revenue-free. The largest share is held by Jats, and after them come Banias, Sheikhs, Pathans, Chauhans, Saiyids and Khattris. The Chauhans, Brahmans, and other village communities have lost heavily of late years, and in most cases their lands have passed into the possession of Banias. Several wealthy Bania families reside at Najibabad and Kiratpur, the chief being represented by Sahu Har Prasad, who owns 24 villages and seven muhals assessed at Rs. 8,312. Sahu Lachman Das holds eight villages. Sahu Hari Chand six, and Sahu Ajodhya Prasad two, and Sahu Salik Chand five villages in the pargana. The Najibabad Khattris, of whom the chief is Sahu Sansar Chand, have largely increased their estate in a similar manner. The most important property is that of the Sahanpur Jats, comprising 90 villages with a revenue of Rs. 26,991. The well known family of Kiratpur Muftis own 14 villages and two mahals, paying Rs. 5,555, now divided into five separate portions. Of the non-resident proprietors the chief is Durra-un-najaf Begam, widow of the late Wazir Usman Khan, of Rampur, who owns ten villages and one mahal which formerly belonged to the Nawab of Rampur and were granted to the Wazir in recognition of the services to that State.

The population of the pargana numbered 61,875 persons in 1853, and has since greatly increased. It rose to 64,840 in 1865, and to 67,491 in 1872; in 1881 it dropped to 63,870, but ten years later the total was no less than 76,614. the last census in 1901 a slight decrease was again observed. the number of inhabitants being 75, 869; of whom 36,048 were females. Classified according to religions, there were 45,031 Hindus, 30,241 Musalmans, and 597 others. In addition to Najibabad itself, the pargana contains the small towns of Nagal, Sahanpur and Jalalabad, each of which is separately described, and apart from these only two villages, Mubarakpur and Sarai Alam, contain over a thousand inhabitants. Means of communication are fair, since through the extreme south passes the main line of the Oudh and Rohilkhand Railway with a station at Najibabad, and from this place a branch line runs northeastwards to Kotdwara, with stations at Bhogpur and Saneh Road. Except in Najibabad itself the roads are unmetalled, the chief being those leading from the tahsil headquarters to Nagina, Bijnor, Nihtaur, Kotdwara and Hardwar. From the last a branch leads to Nagal and the Ganges, crossing the road from Bijnor and Mandawar to Hardwar.

Originally the pargana was known as Jalalabad, and the name was not changed till the foundation of Najibabad by Najib-ud-daula. The area was greatly increased in 1842 by the cession of the Chandi ilaqa from Garhwal, but in 1866 it was slightly reduced by the surrender to the latter district of the strip of land lying between the submontane road and the foot of the hills.

NAJIBABAD tahsil.

This is the northern subdivision of the district, being composed of the three parganas of Najibabad, Kiratpur and Akbarabad, each of which has been already described in a separate article. It is of an irregular shape, stretching southwards from the submontane road, which marks the Garhwal border, towards the centre of the district. To the east lie the Barhapura and Nagina parganas of tahsil Nagina, the latter also forming in part the southern boundary, the remainder of which is taken up by pargana Bijnor. On the west the boundary is the Ganges for a considerable distance, separating this district from Saharanpur, while further south pargana Mandawar of the Bijnor tahsil intrudes between the river and pargana Kiratpur. The total area is liable to change but slightly, as the variations in the upper reaches of the Ganges are not great; the average for the five years ending in 1906 was 253,614 acres or 396 3 square miles.

A large amount of this is covered by forest, for in addition to the reserved forest of Chandi, which includes the low hills in the extreme north of pargana Najibabad and the sloping ground at their base as far as the Rawasan river, there is a more or less dense belt of jungle all along the northern boundary. The surface of the ground is covered by inferior timber or wide expanses of open grass, and is broken by numerous hill torrents, some of which, such as the Kotawali, pass direct into the Ganges, while the majority are affluents of the Malin, which forms the

main drainage line for the western half of the tahsil. Such are the Ratnal, Lakharhan, and others which have been already described. Below the forest belt is a fairly level stretch of country with a good stiff soil, continuing southwards into Kiratpur and Akbarabad. The western parts of Kiratpur stand high and have a light sandy soil, this being the commencement of the western uplands of tahsil Bijnor. Further east the level drops to the rice lands of the central uplands, in which the Chhoiva, Ban and Gangan have their sources.

Like Dhampur, the tahsil has benefited extensively from the introduction of railways. The main line of the Oudh and Rohilkhand system on reaching Najibabad turns sharply to the west, traversing the north of pargana Kiratpur and thence passing into Mandawar and crossing the Ganges. There are stations at Najibabad and Barampur, from the former of which a branch line runs north-east through the forest to Kotdwara, with stations at Bhogpur and Saneh Road. There are no metalled roads in the tahsil, excepting that which connects the town of Najibabad with the railway, and unmetalled roads are not very numerous, especially in the northern tracts. Through Najibabad runs the road from Moradabad and Nagina to Shampur and Hardwar, crossing the Ganges at Shishamwala. A branch from this takes off at Sahanpur, leading to Nagal and Balawali station; and a second runs from Amsot to Laldhang on the Garhwal border. Other roads radiate from Najibabad to Kiratpur and Bijnor to Akbarabad and Nihtaur, to Barhapura and Kalagarh, to Kot Qadir, and to Kotdwara, the last being classed as provincial. Kiratpur and Akbarabad are connected by a road running from Raoli ferry and Mandawar to Nagina, and besides those mentioned there are one or two others, the position of which is to be seen on the map. The ferries over the Ganges are given in tabular form in the appendix.

Besides the municipality of Najibabad, the tahsil contains the Act XX town of Kiratpur and several other places of considerable size, such as Akbarabad, Nagal, Jahanabad and Sahanpur, each of which forms the subject of a separate article; the larger villages have been noted in the various pargana accounts. The chief trade centre is Najibabad, which possesses

several industries of minor importance. The schools, postoffices, markets and fairs are given in the appendix. The tahsil is administered as a subdivision of the district in the charge of a full-powered deputy collector and magistrate, and for revenue and criminal work there is a tahsıldar stationed at Najibabad. The civil jurisdiction is divided between the munsifs of Nagina and Bijnor, the former dealing with cases arising in pargana Najibabad, and the latter taking the rest of the subdivision. Under existing arrangements there are police-stations at Najibabad, Kiratpur, Nagal and Shampur, to the first of which is attached the outpost at Kauria on the northern border. Under the new scheme Shampur will be converted into an outpost and its circle amalgamated with that of Nagal; the retention of a small force being considered necessary on account of the number of pilgrims passing along the Hardwar road.

The population of the tahsil has fluctuated from time to time, but the total shows a large increase during the past fifty years. In 1853 the recorded number of inhabitants was 135,494, but this dropped to 133,434 in 1865, probably on account of the extensive exodus of Pathans after the Mutiny. It again rose in 1872 to 141,685, but fell once more in 1881 to 133,561 on account of famine and disease. In ten years, however, the tract had completely recovered, the aggregate in 1891 being 156,873. At the last census a slight decline was observed, the total numbering 153,896 souls, of whom 74,504 were females. The reason of the falling off is not apparent, as it was almost wholly confined to the male population. Classified according to religions, there were 93,385 Hindus, 59,009 Musalmans, 845 Aryas, 332 Christians, 299 Jains, and 26 Sikhs. Among the Hindus the foremost place is taken by Chamars, of whom there were 26,015, and after them come Jats, numbering 10,077; Rawas, 6,989, a caste almost wholly confined to this tabul and pargana Mandawar of Bijnor; Banias, 5,728; Brahmans, 4,475, and Rajputs, 4,136, of whom 3,344 were Chauhans. Besides these, Kahars, Kumhars, Barhais, Gadariyas, Koris, and Bhangis occur in numbers exceeding 2,000 apiece. The majority of the Musalmans are either Sheikhs, 13,607, or Julahas, 10,580. Other

important tribes and castes include Pathans, Faqirs, Qassabs, Saiyids, Hajjams, Telis and Behnas.

The strictly agricultural population amounts to 44.7 per cent. of the whole, and though this figure excludes those who devote themselves to cultivation in addition to other means of livelihood, the proportion is lower in this tabsil than in other parts of the district. About 9.5 per cent. are engaged in the manufacture of textile fabrics, 9 per cent. in general labour, 7 per cent. in the supply of food and drink, and the rest come principally under the headings of pasture and cattle-breeding, transport and storage, and work in wood and other jungle produce.

NIHTAUR, pargana NIHTAUR, tahsil DHAMPUR.

The place which gives its name to the Nihtaur pargana is a considerable town, standing near the right bank of the river Gangan, in 29° 20' N. and 78° 24' E., at a height of about 780 feet above the sea, some 16 miles east from Bijnor and eight miles west from the tahsil headquarters. It is connected with the latter by a metalled road, crossing the Gangan by a bridge, a short distance below which are the headworks of the canal that irrigates the lands on the eastern bank. A branch from this road runs north to Nagina, taking off at the bridge; and other unmetalled roads lead to Najibabad, Kiratpur, Bijnor, Daranagar, Chandpur and Nurpur. Nothing is known of the history of the town, but it is a place of some antiquity, and was the capital of a pargana at least as early as the time of Akbar. During the past fifty years it has grown rapidly. In 1847 the population numbered 8,129 souls, and though this dropped in 1853 to 7,581, it has risen ever since, reaching 8,195 in 1865, 9,392 in 1872, 9,686 in 1881, and 10,811 in 1891. At the last census the number of inhabitants was 11,740, of whom 8,341 were Musalmans, 3,027 Hindus, and 372 of other religions, chiefly Aryas.

The town has few conspicuous features, the only old building being a handsome mosque with three modern fluted domes. There are but few brick houses, most of the dwellings being of mud, clustered round the junction of the many roads, and interspersed with several open spaces overshadowed by fine trees. The trade of the place is of no great importance, and the markets held twice a week in the principal bazar are of merely local interest. The chief industries are cloth weaving and dyeing, carried on by the Julahas. The public buildings comprise the police-station, a post-office, a cattle-pound, and a middle school. The last is located in a building that was confiscated during the Mutiny and has an inner court which serves as a playground. There is also a small mud sarai, privately owned, as well as an aided school for boys and two girls' schools, one maintained by the district board, and the other supported by a grant-in-aid. Three small fairs are held here annually in honour of Zahir Diwan, Bale Salar, and Shah Madar, but in no case does the attendance exceed a thousand persons.

The town has since 1865 been administered under the provisions of Act XX of 1856. Within the chaukidari area, which occupies 131 acres, there were 1,976 houses in 1906, and of these 1,101 were assessed to taxation. The total income for the three preceding years averaged Rs. 2,512 annually, including the opening balance, and towards this the house-tax contributed Rs. 1,621, falling with an incidence of Re. 1-7-9 per assessed house and Re. 0-2-6 per head of population. The miscellaneous receipts are considerable, and are derived mainly from rents of Government land and buildings. The expenditure for the same period averaged Rs. 2,270, the principal items being Rs. 835 for the maintenance of the local police force, Rs. 512 for the conservancy staff, and Rs. 762 for minor improvements. The town lands are altogether 692 acres in extent, about 400 acres of this being under cultivation. They pay a revenue of Rs 1,700, and are owned in joint zamindari tenure by Tagas, Musalmans and Chauhans.

NIHTAUR pargana, tahsil Dhampur.

This is the smallest pargana of the tahsil, of which it constitutes the north-western portion. It is a long and narrow tract, lying between the Ban and its tributary, the Banra, on the west, which separate it from the Bijnor tahsil, and the Gangan on the east, this river dividing the pargana from Dhampur. To the north is pargana Nagina and to the south Burhpur. The total area is 41,454 acres or 64.7 square miles.

The whole pargana is of a remarkably uniform nature, lying entirely in the central upland belt, at a much lower level than the country on either side. The surface is broken only by the river beds, and there are no sand-hills, nor indeed any bhur; the soil is either loam or clay, the latter amounting to 31.23 per cent. of the whole, and the former making up the remainder, though it includes 7.28 per cent. of light loam known as bhur sawai, which is found in occasional patches. The clay soils as a rule bear but a single crop of rice, but in years of late and abundant rains they produce excellent spring crops; while the loam lands are capable of bearing all crops and of being cultivated in both seasons. The villages along the Ban and Banra, which unite near the southern boundary, are somewhat inferior, for these streams, or rather drainage lines, have but ill-defined channels and are apt to inundate the land in their vicinity, while they are almost useless for irrigation purposes, being generally dry in the cold weather. The Gangan, on the other hand, has a deep and permanent bed. and does its work of carrying off the surplus drainage very efficiently; it irrigates a small area, but the bulk of its waters are diverted into the canal on the eastern bank. Owing to the lowness of the level, there are many small ponds and jhils, but none is of sufficient size to merit special mention: the rapid slope of the country from north to south necessitates efficient drainage and precludes the accumulation of large expanses of water.

The cultivated area is very large, amounting on an average, for the five years ending in 1906, to 30,706 acres or 74·1 per cent. of the whole. This implies a high state of development, and is only exceeded in Burhpur and Chandpur; though the larger proportion of land bearing a double crop, which averages 16 per cent. of the net cultivation, places Nihtaur well above those two parganas. The expansion has been gradual, for as early as 1835 the land under tillage amounted to 26,128 acres, rising to 27,933 acres thirty years later. Of the remaining area 3,702 acres or 8·9 per cent. are shown as barren, and 7,046 acres or 17 per cent. as culturable. The former includes 1,803 acres under water and 1,768 acres occupied by villages, roads and the like, leaving only 131 acres of actually barren land. Similarly, if the 760 acres of grove land and the 2,459 acres of recent fallow and land prepared

for sugarcane be excluded, the amount available for further cultivation is reduced to 3,827 acres, an extremely low proportion. The pargana has abundant means of irrigation, but the area watered is small in normal years, averaging but six per cent. of the cultivation. Unprotected wells can be dug in every village and at a small cost, the average depth at which water is found being but 15 feet below the surface; but the sub-soil is often loose and friable, so that the wells, which supply almost the whole of the irrigation, last for a few months only. These wells can, however, be multiplied without limit, and the many ponds form an additional resource, though their use entails severe labour.

The rabi harvest has largely expanded with the increasing prevalence of double-cropping, but still averages only 12,943 acres as compared with 22,600 acres sown in the kharif. The crops too have improved in quality to a remarkable extent. Rice covers an area exactly equivalent to the entire rabi sowings, or 57.2 per cent. of the harvest, this being the highest proportion in the district. Next comes sugarcane with 18.2 per cent., a figure only exceeded in Nagina and Kiratpur, the amount having nearly doubled since 1865. The other principal kharif staples are bajra mixed with arhar, and cotton, each aggregating 4.7 per cent., while the rest is made up by juur grown as fodder, and the coarse pulses and millets. Wheat is the chief rubi crop, covering 39.8 per cent. of the area, and then come gram with 28, and barley alone and in combination with 26 per cent.

Among the cultivating community Jats preponderate, and these are followed by Sainis, Chamars, Tagas, Chauhans and Musalmans. The total area included in holdings in 1906 was 33,463 acres, and of this 14·4 per cent. consisted of proprietary cultivation, either sir or khudkasht. Occupancy tenants hold 33·9 per cent. and tenants-at-will 50·5 per cent. of the land, while the rest is either in the hands of ex-proprietors or else is rent-free. The rental varies with the nature of the soil, being much lower in the clay tracts than in the upland portion. On an average occupancy tenants pay Rs. 6 and tenants-at-will Rs. 7 per acre, the former rate being unusually high. About five per cent. of the land is sublet, and shikmi tenants pay as much as Rs. 8 per acre. For details of the revenue demand as assessed from time to time

reference must be made to the appendix.* At the last revision the revenue was increased by about 42 per cent. and the incidence is now almost the highest in the district, being exceeded only in the neighbouring pargana of Nagina.

The pargana contains 205 villages, which in 1906 were divided into 349 mahals. Of the latter 114 were owned by single proprietors, and 167 were joint zamındari; 30 were held in perfect, and 20 in imperfect pattidari tenure, and the remaining 18 were bhaiyachara. The proprietors are chiefly Tagas, Chauhans. Saivids, Banias and Sheikhs. The largest landowner is Raja Harbans Singh of Haldaur, who owns 20 villages and eight mahals assessed at Rs. 8,385, and next comes Kunwar Terbal Bikram Singh of the same family with nine villages and two mahals. The Raja of Tajpur and his brother own 13 villages and parts of two others, and six villages belong to Chaudhri Ranjit Singh of Sherkot. All these are non-resident, and the only large proprietors within the pargana are the Taga Chaudhris of Nihtaur, who together own some 36 villages and a number of shares. The remainder are principally Saiyids and Sheikhs of Nihtaur, many of whom are in Government service, or else village communities of Jats and Brahmans.

In 1853 the pargana had a population of 33,370 persons, and this dropped to 32,518 in 1865, but rose again to 37,473 in 1872. A slight decline was observed in 1881, when the total was 36,864. but ten years later it rose to 41,262, while at the last census the number of inhabitants was 44,912, giving an average density of 696 to the square mile, or almost the highest figure in the district. Classified by religions, there were 25,515 Hindus, 18,717 Musalmans and 683 others. Nihtaur is the only place of any size or importance, and with this exception the villages are remarkably small, Rustampur alone containing more than a thousand inhabitants. Though possessing neither railway nor metalled road, save for a small portion of that connecting Nihtaur with Dhampur, the pargana has very fair means of communication. since many unmetalled roads radiate from Nihtaur, leading to Nurpur, Chandpur, Daranagar, Bijnor, Kiratpur, Najibabad and Nagina.

As a fiscal subdivision the pargana dates back to a period at least as early as the time of Akbar. It remained practically unchanged till 1844, when the old parganas of Haldaur and Jhalu were abolished, and the area was increased by the addition of 18 villages from the former, though at the same time it lost some territory to the newly-formed pargana of Burhpur.

NURPUR, pargana Burhpur, tahsil Dhampur.

This small town stands in the centre of the pargana, in 29° 9' N. and 78° 25' E., on the west side of the road from Bijnor to Moradabad, at a distance of 23 miles from the former, and some 13 miles south-west from the tabsil headquarters, with which it is connected by an unmetalled road continuing to Dhanaura in Moradabad. Other roads lead to Seohara, Chandpur and Nihtaur. The town is built on high ground between the Gangan and Ban rivers, the latter flowing a mile to the west of the site. It is little more than a large agricultural village, composed mainly of mud houses. The population, which in 1872 numbered 2,744 souls, had risen to 3,127 in 1891, while at the last census the place contained 3,260 inhabitants, of whom 1,975 were Musalmans. 1,226 Hindus and 59, chiefly Christians, of other religions. Nurpur possesses a police-station, a cattle-pound, a post-office, an upper primary school, and a bazar in which markets are held weekly. The trade is insignificant, as it has long been diverted to the more flourishing town of Tajpur. The village lands are 2,407 acres in extent, the cultivated area being about 1,765 acres. and are held at a revenue of Rs. 3,850 in joint zamindars tenure by Banias, Ahirs, Jats, Brahmans, Banjaras and Musalman Fagirs.

PHEONA, pargana Burhpur, tahsil Dhampur.

A large agricultural village in the south-west of the pargana, standing in 29° 4′ N. and 78° 22′ E., on the high sandy uplands to the west of the Ban river, at a distance of six miles south-east from Chandpur and 25 miles from the district headquarters. Through it runs the road from Chandpur to Amroha, and to the west of the village this is crossed by the road from Dhampur and Nurpur to Dhanaura in Moradabad. Pheona was famous in

Mutiny history as a rallying point for the loyal Hindus, who vainly attempted to recover the district from the Musalmans, but is now of little importance. The population in 1872 numbered 3,041 souls, and this rose to 3,107 in 1891, while at the last census it was 3,499, including 553 Musalmans and a very large community of Chauhans. The village lands are 1,866 acres in extent, some 1,675 acres being cultivated, and are assessed at Rs. 4,050: they are held in joint zamındarı tenure by Chauhans, Banias, Brahmans, Behnas and Sheikhs. There is an upper primary school here, and a bazar in which markets are held weekly. In August a large fair takes place in the village in honour of Zahir Diwan.

PURAINI, pargana and tahsil Nagina.

A small village near the southern borders of the pargana, standing in 29° 23′ N. and 78° 27′ E., on the west side of the road from Nagina to Dhampur and Moradabad, at a distance of five miles south from the tahsil headquarters. It deserves mention as possessing a station on the railway, which passes along the western outskirts of the main site. The place also contains a branch post-office and an upper primary school, while markets are held twice a week in Kalyanpur, an adjoining village on the south. The population at the last census numbered 924 souls, of whom 261 were Musalmans; the chief castes are Chauhans, Julahas and Chamars. The original village has been split up into several portions, and now has an area of 1,146 acres, of which 870 acres are cultivated; the revenue is Rs. 2,757, and the proprietors are Chauhans and Musalmans holding in joint zamindari tenure.

QASIMPUR GARHI, pargana Afzalgarh tahsil Nagina.

A small town standing in 29° 23′ N. and 78° 44′ E., at a distance of four miles east from Afzalgarh, and about 43 miles from the district headquarters. It is approached by a rough track leading off the road from Afzalgarh to Rehar, which runs half a mile to the south of the main site. The place is built on high ground a mile west from the right bank of the Banaili river, and consists of blocks of poor and dilapidated houses ranged on either side of a central bazar. It derives its name from Qasim

Khan, a Rohilla, but it never attained any distinction in local history: it is also known locally as Garhi Maniawala. The population in 1872 numbered 2,073 souls, and remained stationary till 1891, when the total was 2,041. Since that date it has undergone a marked decline, the number of inhabitants in 1901 being 1,645, of whom 929 were Musalmans. The latter are chiefly Julahas, who still devote themselves to weaving, but the trade of the place is unimportant, and little business is done at the weekly markets. There is an upper primary school, as well as an aided school for girls, and a small fair is held annually in August. The town was administered for some years under Act XX of 1856, but the operations of the Act were withdrawn on account of the poverty of the place. The village lands cover 406 acres, of which about 300 acres are cultivated; they are held at a revenue of Rs. 921 by Chaudhri Hem Chand, the head of a resident Rapput family, which owns six other villages in the neighbourhood.

RATANGARH, pargana Burhpur, tahsil Dhampur.

This village, otherwise known as Azamgarh, stands in 29° 6′ N. and 78° 23′ E., on the east side of the road from Dhampur and Nurpur to Pheona and Dhanaura, at a distance of about 23 miles from Bijnor and 17 miles south-west from the tahsil headquarters. No trace now remains of the fort from which the village derives its name, and nothing is known of its history. It contained in 1901 a population of 1,280 souls, of whom 243 were Musalmans. The area is 1,843 acres, of which some 1,290 acres are cultivated, and the revenue is Rs. 1,810. The proprietors are Tagas, holding in joint zamındari tenure. The place possesses a post-office and a lower primary school, but has no other claim to mention.

REHAR, pargana Afzalgarh, tahsil Nagina.

A small and greatly decayed town standing in 29° 21′ N. and 78° 41′ E., in the eastern half of the pargana, seven miles east from Afzalgarh and forty miles from the district headquarters. It is built on the right or west bank of the Pili river, close to the forest, which stretches to the north and east, and is approached by an unmetalled road from Afzalgarh, which continues

in a south-easterly direction to the Ramganga and the Kashipur tahsil of the Naini Tal district. An inferior branch road leads northwards along the outskirts of the forest to Dharamandi on the submontane road. The place was at one time of some importance, being the headquarters of a chakladar during the days of Oudh rule, the circle including portions of the modern districts of Naini Tal and Moradabad. After the cession it remained the capital of a pargana, but in 1852 this was amalgamated with Afzalgarh. The population numbered 4,480 persons in 1872, and for some time continued stationary, the total in 1891 being 4.419. At the last census, however, it was found to have suffered in common with the rest of the pargana, the number of inhabitants having fallen to 2,711, of whom 1,452 were Musalmans, 1,236 Hindus and 23 of other religions. The Muhammadan community consists principally of Sheikhs and Julahas, of whom the latter still carry on their ancestral trade of weaving. Among the Hindus are many Rajputs, the place being the residence of a Gorwa family, now represented by Rai Lakhan Singh, who owns this and 27 other villages in the pargana. The area of Rehar is 755 acres, of which some 415 acres are cultivated, and the revenue is Rs. 990. The town was administered under Act XX of 1856 from 1865 to 1901, when the measure was withdrawn on account of the poverty of the inhabitants. It still possesses a police-station, a post-office, a cattle-pound, and an upper primary school. Markets are held weekly in the bazar and a small fair takes place here during August, in honour of Zahir Diwan.

SABALGARH, pargina and tahsil NAJIBABAD.

Sabalgarh is the largest of the many fortified remains in the district, and stands in 29° 43′ N. and 78° 14′ E., between the Ganges and the road from Najibabad to Hardwar, at a distance of nine miles north-west from the tahsil headquarters and 32 miles north of Bijnor. The site is well chosen, as it is protected on the south and east by the forest, and on the north and west by the high banks and ravines of the Ganges and the Kotawali torrent. It is said to have been built in the reign of Shahjahan by Nawab Sabal Khan, a Jat converted to Islam, and is therefore bout 270 years old. In 1759 it was occupied by the Rohilla

Bakhshi Sardar Khan; but before 1796 it was a dismantled ruin. Captain Hardwicke, writing in that year, observed that there was a considerable village within the walls, but that the extensive lines of fortifications were rapidly falling into decay. Much of the ground within the fort was cultivated, and the only part remaining intact was the south-eastern gateway. There is now hardly anything to be seen: the great wall with its bastions at the four corners and at other intervening points, which enclosed an area of 114 acres, is overgrown with jungle, while none of the buildings that once occupied the interior any longer exist. The village of Sabalgarh contained in 1901 a population of only 80 persons; it has an area of no less than 3,400 acres, but most of this is jungle, little more than 800 acres being under cultivation. The proprietors are the Jats of Sahanpur and pay a revenue of Rs. 1,175.

To the north of Sabalgarh, on the opposite bank of the Kotawali, stood another fortress known as Asafgarh, but this has wholly disappeared, having been washed away by the action of the stream.

SAHANPUR, pargana and tahsil Natibabad.

This village, shown in the revenue records as Girdawa Sahanpur, stands in 29° 37' N. and 78° 20' E., on the north side of the road from Nambabad to Hardwar, a little more than two miles north-west from the tahsil headquarters, 23 miles from Bijnor, and half a mile to the east of the point where the road crosses the Ratnal, a branch of the Malin liver. The place derives its chief importance as being the headquarters of the great Jat family, of which an account has been given in chapter III, and it is said to have been founded by the first chieftain of this race in 1605, when the old fort was constructed. The village has grown up round the fort, and is evidently of some antiquity: on the outskirts are several handsome sutt monuments, two of which date from the reign of Aurangzeb, the most important being that of Rani Lakshmi, the widow of Rai Rajaram, who died in 1116 H. In the adjoining garden there is a large well bearing an inscription, dated ten years later, during the reign of Besides the large family residence, the village Muhammad Shah.

contains little of any interest of importance. There is a lower primary school, and a bazar in which markets are held twice a week; a small fair takes place here during August in honour of Zahir Diwan. The population has remained stationary for some years, and at the last census numbered 4,256 persons, of whom no fewer than 2,567 were Musalmans; the majority of the Hindus are Jats of the Deswala subdivision. The village lands are 1,200 acres in extent, but of this only some 620 acres are cultivated; they are held by the Jats in joint zamindari tenure at a revenue of Rs. 1,200.

SAHASPUR, pargana Seohara, tahsil Dhampur.

A town in the south of the pargana, adjoining the Moradabad border, in 29° 7′ N. and 78° 37′ E., at a distance of 16 miles south from Dhampur and about 40 miles from the district headquarters. It lies mainly to the east of the unmetalled road from Moradabad to Nagina, and from this a metalled branch leads to the railway station, half a mile to the west. The town is built on high ground overlooking the Ramganga lowlands, and is well drained by numerous ravines and channels winding eastwards. None the less Sahaspur has at all times been notorious for its dirtiness and squalor. Thornton described it as "a very filthy place, remarkably crowded with hog," and Davidson, in his "Travels in Upper India" made mention of the herds of pigs and the consequent dirt of the town. "Pork, he remarks, ought to be cheap, for the neighbouring fields, roads, ravines and pools were covered with these filthy untutored animals." Similar strictures on the pigs and the inhabitants were repeated in 1868 in the first report of the Sanitary Commissioner, who wrote that the Chamars' quarter was altogether abominable and unfit as a place of residence for human beings. It is rather surprising that Sahaspur should be an essentially Musalman town: but other proofs of Muhammadan tolerance are not wanting, for some thirty years ago a speculative Musalman built a fine sarai for the benefit of Hindu pilgrims journeying to and from Hardwar. This building, which stands by the road on the north-western outskirts of the town, has a handsome frontage and a courtyard planted with shady trees. Apart from this,

Sahaspur possesses few points of interest. Most of the houses are mud-built, and the place resembles rather an overgrown village than a town. The bazar is a large open square containing some fine trees, but is surrounded by squalid shops. Markets are held here twice a week, though the trade is small, and the only industry of any note is the manufacture of cotton cloth, some of it being of a superior description. To the east of the town, in the village of Ghauspur, a considerable fair takes place annually in honour of a Musalman saint named Arif Ali Shah, and is made the occasion for considerable trade in country produce. The town possesses a police-station, a post-office, a cattle-pound, several small mosques, and an upper primary school.

The population remained stationary for a long period, but has decreased of late. In 1847 it numbered 6,414 souls, rising to 6,442 in 1853, but falling to 6,196 in 1865. Seven years later it was 6,309, in 1881 it was 6,338, and in 1891 it remained at 6,400. At the last census, however, the total was 5,851, of whom 4,996 were Musalmans, 827 Hindus, and 28 Aryas and others. The chief family is that of the Musalman Chaudhris, who are Pathans by descent and own a considerable property in the neighbourhood. They are the proprietors of the revenue mauza, which comprises an area of 1,998 acres, some 1,330 acres being cultivated, and is assessed at Rs. 2,988. In 1873 Sahaspur was brought under the operations of Act XX of 1856, but the inhabitants were found too poor to pay the house-tax and the measure was withdrawn.

SEOHARA, pargana Seohara, tahsil Dhampur.

The capital of the Seohara pargana is a town of considerable size, standing in 29° 12′ N. and 78° 35′ E., at a distance of nine miles south-east from Dhampur and 34 miles from the district headquarters. Through it runs the unmetalled road from Moradabad to Nagina, and from this a metalled branch leads to the railway station, half a mile west of the town, and continues in an unmetalled state to Tajpur and Nurpur. The town is built on high ground overlooking the Ramganga valley to the north-east and east, and the soil is sandy and well drained, either by the ravines leading down to the low ground, or else by the channels

communicating with a large tank on the south, from which the surplus water is discharged by a western outlet into the Ekra-

Scohara is an old Taga settlement, but has no history of note. It is lacking in ancient buildings, but contains several fine old wells with raised borders of rough stone, from which the drinking supply is obtained. The houses are mainly of mud, but there are some fifty substantial brick dwellings, the chief being that of the Taga family of Chaudhris, now represented by Rai Basant Singh Bahadur, the leading landholder of the pargana. On the main road there are two sarais facing one another, but both are in a dilapidated condition. Markets are held twice a week in a large open space on the west, near the railway station, adorned by some magnificent tamarind trees. The trade is not great, though its position on the railway lends some importance to the town. The public institutions comprise a police-station, a postoffice, a cattle-pound and an upper primary school, while there are no less than five aided schools. The population numbered 9,099 souls in 1847, and this rose in 1853 to 9,221, but fell to 8,710 in 1865, and again to 8,340 in 1872. Since that time the total has risen steadily, reaching 9,014 in 1881, and 9,465 ten years later, while in 1901 the town contained 10,062 inhabitants, of whom 5,036 were females. Among the various creeds Musalmans preponderate, numbering 7,088 as compared with 2,642 Hindus, and 332 others, Jains, Christians, Aryas and Sikhs.

The town lands are 383 acres in extent, and of this about 170 acres are cultivated: they are held by Tagas in joint zumindari tenure at a revenue of Rs. 200. The town proper covers 189 acres, and this area has been administered since 1865 under the provisions of Act XX of 1856. The number of houses in 1906 was 1,533, of which 1,000 were assessed to taxation: the average income from the house-tax for that and the two preceding years was Rs. 1,367, which gives an incidence of Re. 1-6-11 per assessed house and Re. 0-2-3 per head of population. The total income from all sources, including the initial balance, was Rs. 2,269, and the expenditure averaged Rs. 2,031, the principal items being Rs. 738 for the upkeep of the local police, Rs. 442 for the maintenance of a conservancy tax, and Rs. 727 for minor improvements, paving, lighting, and the like.

SEOHARA pargana, tahsil Dhampur.

This pargana forms the south-eastern portion of the tahsil, being bounded on the south and east by the Moradabad district, on the north-east by pargana Afzalgarh, the dividing line being the Ramganga river, on the north by Dhampur, and on the east by Burhpur, from which it is separated partly by the Karula and partly by the Gangan. The total area of the pargana is 65,459 acres or 102 square miles—The amount is, however, liable to vary from time to time by reason of the action of the Ramganga, villages being occasionally added or taken away owing to the vagaries of the river in time of flood.

The pargana consists of two distinct tracts with widely diverse characteristics. The western and by far the larger portion belongs to the upland plateau or bangar, and is traversed from north to south by the Ekra, a small stream which is joined in the extreme south, near the village of Kiwar, by the Karula. The latter river at first forms the western boundary, and then enters the pargana near Rawana, turning in a south-easterly direction towards the Moradabad border. Another upland stream is the Bakal, a brook which rises near Seohara and falls into the Ekra on its left bank at Rampur Kishan. The Gangan in the southwest has but little influence on the pargana, flowing in a deep and permanent bed, and receiving the drainage of a very small area: but it is of some use as an irrigation channel, as also are the other watercourses, though the flow is very scanty in the cold weather. The uplands between the Gangan and Karula are level, devoid of sand, and possess a strong loam and clay soil, with a fair amount of irrigation from wells: there was in former days a considerable area of scrub and dhak jungle, but most of this has disappeared and cultivation has extended rapidly. In years of good rainfall the crops are excellent, but the stiffness of the soil necessitates much ploughing and generally precludes doublecropping. Beyond the Karula the aspect of the country changes: the surface is uneven, rising at times into sandy ridges, while everywhere the soil contains a large admixture of sand; though it seldom occurs in such large quantities as to interfere seriously with the productiveness of the soil. The crops are of a good quality, the tenants of a high stamp, and irrigation is comparatively abundant.

The uplands terminate in the irregular and sloping bank which marks the elge of the Ramganga valley, the latter lying some twenty or thirty feet below the level of the former. The bulk of the khadir is well beyond the reach of fluvial action, and consists of a rich stretch of stable cultivation, producing fine harvests of the superior crops. The soil is a fertile loam or clay, of comparatively recent origin, and water is so near the surface that there is no danger in time of drought; but the tract is sparsely populated and the villages small, many of the cultivators residing in the large and flourishing townships on the edge of the uplands. The drainage leads directly into the Ramganga, the principal channel being the Dungraiya, which rises near Seohara and joins the river at Raini or Sheikhpur Khaddar. In the immediate vicinity of the Ramganga the general conditions change, and the eighteen alluvial villages are poor and precarious: owing to the heavy floods there is a broad belt of marsh and sand on either bank. producing little beyond thatching grass; the actual bed is practically uncultivated, for the variations are so great that the fields seldom remain undisturbed for a single year.

The pargana has attained a high standard of development. and the increase of the cultivated area has been very great since the settlement of 1835, when it amounted to 31,947 acres. 1865 it had risen to 36,248 acres, and at the last revision the figure was 38,572 acres. The subsequent expansion has been remarkable, as for the five years ending in 1906 the average area under tillage was no less than 45,476 acres or 69.5 per cent. of the whole pargana. Of the remainder, 7,215 acres were returned as barren, including 2,826 acres covered with water. 2,420 occupied by village sites, roads and the like, and 1,969 acres actually unfit for cultivation; and 12,768 acres as culturable, or 19.5 per cent. of the entire area, though this includes 519 acres of groves and 4,061 acres of recent fallow or land prepared for sugarcane, leaving 8,188 acres of culturable waste and old fallow, much of this being of very little value. The irrigated area is comparatively large for this district, averaging 3,168 acres or 7 per cent. of the cultivation: the chief sources of supply are kachcha wells, which can be dug almost everywhere and in the greater part of the uplands, to which almost all the irrigation is

confined; the subsoil is so firm that bullocks and the charas can be employed instead of the usual dhenkli. The water-level is as a rule not more than 16 feet below the surface, so that construction is cheap, especially as the wells are fairly durable. The area served by the streams and watercourses is not large, and is confined to the fields on their immediate banks: the labour involved is great, owing to the height to which the water has generally to be raised.

The kharif harvest is much more extensive than the rabi, the average areas being 31,090 and 22,923 acres respectively; but the latter has increased rapidly of late years, owing to the greater prevalence of double-cropping, the area sown twice in the year averaging 19 per cent. of the net cultivation. The chief kharif staple is rice, which covers 46·1 per cent. of the land tilled in that harvest; and this is followed by sugarcane, with 16·3 per cent., the recent increase under this head being very great; while the remainder consists mainly of bajra and arhar, 10·1 per cent., cotton, 8·6 per cent., urd, mung and moth, 3·8 per cent., and maize 3·8 per cent. In the rabi the foremost place is taken by wheat, 40 per cent., this again showing a remarkable expansion; and then come barley, alone and in combination, with 26·2, and gram with 20·7 per cent., the rest being principally masur, peas and oilseeds.

In both portions of the pargana Chauhans are the chief cultivating caste. Next to them come, in the lowlands, Bishnois, Sheikhs, Sainis and Tagas, while in the uplands Chamars, Jats, Gujars and Ahirs are also found, the Jats taking the second, and Sheikhs the third place for the pargana as a whole, According to the returns of 1906 the area included in holdings was 49,534 acres, and of this 38.7 per cent. was cultivated by occupancy tenants, 9.5 per cent. was in the hands of proprietors, either as sir or khudkasht and 51.2 per cent. was held by tenants-at-will, the small remainder being either rent-free or in the possession of ex-proprietors. Rents vary considerably, being a good deal higher in the khadir than in the upland tract. The general average is Rs. 6-9-0 for occupancy tenants and Rs. 8 per acre for tenants-at-will, these figures being the highest in the district save for the pargana of Nagina. Less than four per cent. of

the land is sublet, and shikmis pay no more than the ordinary unprivileged tenant.

The revenue demand at successive settlements and at the present time will be found in the appendix. * A large increase was taken at the last revision, amounting to 49 per cent. on the expiring demand, but even so the incidence is far from high and well below the general average of the district. point worthy of note is that the land is mainly held by large proprietors. At the present time the 263 villages of the pargana are divided into 425 mahals, of which 137 are held by single owners, 200 are joint zamindari, ten are perfect, and 11 are imperfect pattidari, 34 are bhaiyachara and 33 are revenue-The total includes the 17 alluvial mahals, which were last assessed in 1904-05 at a revenue of Rs. 3,285. The largest proprietor is Chaudhri Basant Singh of Seohara, who owns 66 villages and parts of 23 others, with a total revenue demand of Rs. 36,196. Next come the Bishnoi Chaudhris of Kanth in Moradabad, who together hold 37 villages and parts of four others, assessed at Rs. 20,154; most of these are the property of Chaudhri Ram Kunwar Singh, but nine mahals are held by the widow of his uncle, Chaudhri Dhyan Singh. The Pathan family of Sahaspur hold 18 villages and eight shares, and five whole villages and four parts belong to Kunwar Sheonath Singh of Tajpur. A considerable area is owned by the Banias of Dhampur, and six villages belong to the Haldaur estate. The proprietary communities are principally Tagas, Sheikhs, Chauhans, Saiyids and Brahmans.

The population of the pargana in 1853 numbered 47,311 souls, and though this dropped to 43,949 in 1865, it rose again to 47,031 in 1872, and has since increased steadily; it reached 48,142 in 1881, and 51,012 ten years later, while in 1901 the total was 53,588, of whom 25,264 were females, giving a density of 520 to the square mile. Classified according to religions, there were 32,714 Hindus, 20,402 Musalmans, and 472 others, Christians, Aryas and Jains. The only places of any size or importance are the towns of Seohara and Sahaspur, which have been separately mentioned. The villages are for the most part

^{*} Appendix, Tables IX and X.

small, but Mahmudpur, Rawana Shikarpur, and Sheikhpur Khaddar contain over a thousand inhabitants and possess small bazars. Means of communication are somewhat poor, except in the centre of the pargana, which is traversed by the main line of the Oudh and Rohilkhand Railway, on which there are stations at Sahaspur and Seohara. Parallel to this runs the unmetalled road from Moradabad to Nagina, with metalled branches leading to the railway stations, and another road goes from Seohara to Tajpur and Nurpur, crossing the Gangan over a fine bridge.

In former days there were two distinct parganas known as Seohara and Sahaspur. In the days of Akbar they were both included in the *sarkar* of Sambhal, and were then, as now, owned principally by Tagas. It is not known when the two were unitel, but the amalgamation seems to have taken place before the cession of the district to the British in 1801.

SHAMPUR, pargana and tahsil Najibabad.

A small village in the north-west of the pargana, standing in 29° 52' N. and 78° 11' E., on the road from Najibabad to Hardwar, some 18 miles from the tahsil headquarters and three miles from the Shishamwala ferry over the Ganges. The village is surrounded by forest, and is built on the low ground at the foot of the hills, by the side of a small ravine leading into the It is noteworthy merely as possessing a police-station, a post-office, a cattle-pound, and an encamping-ground to the north of the inhabited site. It has recently been proposed to abolish the police-station and to substitute for it an outpost dependent on the thana at Nagal. There is neither school nor market, and the population at the last census numbered only 383 persons. The village lands are 427 acres in extent, about 160 acres being cultivated, and the revenue is Rs. 200; the proprietors are Jats of the Sahanpur family.

SHERKOT, pargana and tahsil DHAMPUR.

This large and straggling town stands on the high left bank of the Khoh, in 29° 16′ N. and 78° 34′ E., at a distance of four miles north-east from Dhampur and 28 miles by road from the district headquarters. Through it passes the road from Dhampur

to Afzalgarh, crossing the river by a ferry, while others lead to Nagina on the north-west and to Kashipur on the east.

The town is said to derive its name from Sher Shah, and during his reign and that of Akbar it was the headquarters of a pargana. In 1748 the place was seized by Safdar Jang, and again passed into the hands of the Nawab Wazir in 1774. In 1805, four years after the cession of the district to the British. the town was besciged and sacked by Amir Khan Pindari. In 1844 the tahsil headquarters were removed to Dhampur, and Sherkot lost much of its importance. During the mutiny it was the scene of many struggles between loyal Hindus and rebel Musalmans, suffering greatly at the hands of the notorious March Khan. The population in 1847 numbered 11,244 souls. rising to 12,084 in 1853 and 12,586 in 1872. The census of 1881 showed a great increase, the total being 15,087, while ten years later it was 15,589. A slight decline was observed in 1901, when the number of inhabitants was 14,999, of whom 10,745 were Musalmans, 3,925 Hindus, and 329 of other religions, Jains, Christians and Aryas. The principal family is that of the Chauhan Chaudhris, now represented by Rai Ranjit Singh Bahadur, whose palatial house, with two Hindu temples attached, stands just outside the town to the north-west. Part of the town is known as Qazi Sarai, and derives its name from a well known family of Sheikhs, who held the office of Qazi under the Mughals.

The high cliff of the Khoh rises about 45 feet above the riverbed, and is scored by numerous ravines, along which the roads of the town are carried. Most of the houses are of mud, but a fair number are built of brick and there are one or two really fine residences. The place comprises eight muhallus, of which three, known as Sherkot Khas, Faiidnagar or Qila, and Kotra, form the central portion. The remainder lie at some distance from these and from each other, and comprise Taiyub Sarai and Khurara on the south, and Rambari, Samna Sarai and Nondna to the north and east. The chief bazars are in Kotra and Sherkot, the former being a wide brick-paved roadway standing on high ground and flanked by good shops; while the latter is a long, irregular and narrow street in which two carts could with difficulty pass one another. The principal public buildings include the

police-station, the branch dispensary, a post-office, a cattle-pound, and a sarar to the west of the town on the Dhampur road. The trade is mainly in sugar, grain and cloth: the last is manufactured by the Julahas, who also have a local reputation for their embroidered rugs. The market days are Sunday and Thursday in each week, both in Kotra and Sherkot Khas; a fair of no great importance is held here during August in honour of Zahir Diwan. The educational institutions comprise an aided mid-lie vernacular school, three aided primary schools for boys, and two girls' schools.

Since 1865 Sherkot has been administered under Act XX of 1856, and section 34 of the Police Act is in force here. The number of houses in the town is 2,288, and of these 1,445 were assessed, the income from the house-tax for the three years ending in 1907 averaging Rs. 2,141, which gives an incidence of Re. 1-7-11 per assessed house and Re. 0-2-4 per head of population. The total income is much larger, as considerable sums are derived from miscellaneous sources, and averages Rs. 3,104. The annual expenditure is Rs. 2,872, the chief items being Rs. 1,262 for the up-keep of the local police force, Rs 5S4 for the maintenance of a conservancy staff, and Rs. 825 for minor improvements, lighting and the like. The chrukudari area is 342 acres in extent, while that of the whole revenue mauzi is no less than 5.843 acres, of which sone 2,930 acres are cultivated. The Government demand is Rs. 7,346, and is paid by several owners. holding in joint zamindari tonure: they include Chauhans. Sheikhs, Tagas and Kayasths.

SIAU, pargini Chandpur, tuhsil Bijnor.

This large agricultural village is practically a suburb of Chandpur, lying a mile to the north-west of that town on the road leading to the district healquarters. It lies, however, outside the municipal boundary, and in 1901 contained a population of 2,705 souls, including 412 Musalmans and a very large body of Chauhans, who comprise nearly half the total number of inhabitants. Nothing is known of its history, but the place is obviously of some artiquity: in it is an old Muhammadan dargah, known as the Talab Siau, and bearing a Persian

inscription, dated in 968 Hijri. There is an upper primary school in the village, but nothing else of importance, though a fair takes place here during August in honour of Zahir Diwan. The leading family of the place belongs to the Chauhan caste, and owns extensive properties in Chandpur, Burhpur and Bashta.

TAJPUR, pargana Burhpur, tuhsil Dhampur.

This is the chief town in the pargana, and stands in 29° 10' N. and 78° 29' E., on the unmetalled road from Sechara to Nurpur, at a distance of seven miles south-west from the former and 28 miles from Bijnor. A branch road runs northwards to join that from Nurpur to Dhampur, the distance from the tahsil headquarters being about twelve miles. The town is built in the midst of groves on the high land above the Karula river, which flows about a mile to the east. It contains a bazar of some local importance, in which markets are held twice a week, a post-office, a sarai, a large upper primary school, a girls' school, and a dispensary maintained by the Raja. The population, which numbered 4,438 persons in 1872, had risen by 1891 to 4,718, while at the last census the number of inhabitants was 5,015, of whom 2,875 were Hindus, 2,015 Musalmans, and 125 Christians and Aryas. Among the Christians must be numbered Raja Sham Singh, the head of the Taga family, who resides in a fine house built in the European style by his brother, Raja Jagat Singh. Another house is occupied by Kunwar Sheonath Singh. and a third, known as the Rambagh kothi, by Kunwar Randhir Singh and his brother, the sons of Raja Jagat Singh. An account of the family has been given in Chapter III. The lands of Tajpur are held jointly by the various branches of the house, and are assessed at Rs. 1,065, being partly revenue-free: the total area is 1,568 acres, of which some 990 acres are cultivated.

Gazetteer of Bijnor.

APPENDIX.

GAZETTEER

OF

BIJNOR.

APPENDIX.

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Table I.—Population by Tahsuls, 1901.

		Total.			Hındus		M	Musalmans	, m		Others.	
Tahsıl.	Persons	Males.	Females.	Persons	Males.	Females	Persons.	Males	Females	Per- sons	Males	Males Females.
Т	63	8	4	Б	9		8	6	10	11	12	13
Bijnor	203,972	107,044	96,928	135,578	72,293	63,285	64,482	32,702	31,780	3,912	2,049	1,863
Najibabad	153,896	79,392	74,504	93,385	49,295	44,090	69,008	29,303	29,706	1,502	794	708
Nagina	156,898	82,215	74,683	96,295	51,353	44,942	58,350	29,721	28,629	2,253	1,141	1,112
приз	265,185	138,046	127,139	172,593	90,783	81,810	098'68	45,794	44,066	2,732	1,469	1,263
Total	779,951	406,697	373,254	497,851	263,724	234,127	271,701	137,520 134,181		10,399 5,453	5,453	4,946

Table II.—Population by Thanas, 1901.

	Fe- males	13	365 820 60 60 60 308 308 308 308 308 445 113 113 113 113 1185 1185 1185 1185 11	4,946
Others	Miles	12	840 840 840 842 873 873 873 874 874 875 875 875 876 876 877 877 877 877 877 877 877 877	4
	Pe1- sons	11	1,660 1,660 1,194 1,119 8,52 8,52 8,52 8,52 8,14 8,14 8,14 8,14 8,14 8,14 8,14 8,14	10,399 5,453
.8.	Females	10	9,707 4,646 1,087 12,564 12,564 2,282 2,282 2,50 13,561 16,010 6,450 1,7845 7,284 7,284 9,817 5,442	134,181
Musalmans	Males	6	9,998 4,674 1,100 12,485 3,252 14,164 2,417 12,280 16,379	137,520
	Persons	8	19,705 9,320 9,736 2,187 25,032 6,220 27,725 4,699 25,893 32,389 13,710 16,573 16,573 11,537 11,337	271,701
ndus.	Females	7	16,006 13,498 12,418 1,807 24,181 8,292 6,949 17,716 20,793 8,580 11,124 4,445 17,997 17,997 17,997 17,997 17,997 17,997 17,997 17,997 17,997 18,783 18,783 18,783 18,783	234,127
Hindus.	Males	9	18,582 14,840 14,844 1,413 27,147 20,219 7,558 2,992 19,480 9,992 19,480 19,480 19,480 19,480 19,480 19,480 19,480 19,480 19,480 19,595 15,595	263,724
ł	Persons	5	34,588 28,338 26,761 3,720 51,338 18,043 38,215 18,607 3,517 37,146 37,146 37,146 37,378 37,378 37,378 37,551	497,851
	Females	4	26,078 18,964 17,052 2,960 37,031 11,628 31,721 9,321 1,685 11,777 13,400 17,687 6,230 6,230 16,235 25,188 25,188 25,264 19,642	373,254
Total	Males	3	28,999 20,354 3,066 40,021 13,435 10,088 2,559 11,526 11,526 11,526 11,526 11,480 28,324 28,324 28,324 28,324 28,324 28,324 28,324 28,324 28,324 28,324 28,324 28,324	406,697
	Pe _i son s	73	55,077 39,318 6,026 77,026 77,052 25,063 19,409 4,244 63,931 77,528 37,626 37,628 37,628 37,628 37,628 37,628 37,628 44,379 47,888 53,588 41,093	779,951
				:
-	ТПапа	1	T T T T	Total
	11		Bijnor Mandawar Amhera Ganj Chandpur Bashta Najibabad Nigilabad Nigilabad Riratpur Kiratpur Kiratpur Kashapur Afzalgarh Barhapur Sherkot Sherkot Sherkot Nintaur Seohara	

TABLE III.—Vital Statistics.

				Birt	hs.			Dea	ths.	
	Year.		Total	Males	Fe- males	Rate per 1,000.	Total	Males	Fe- males.	Rate per 1,000
-	1		2	3	4	5	6	7	8	9
1891	***	••	27,196	14,501	12,695	34 25	20,658	11,222	9,436	26 02
1892		•••	33,219	17,522	15,697	41 83	28,350	15,267	13,083	35 70
1893		•••	37,309	19,658	17,651	46 98	26,696	14,286	12,410	33 62
1894	•••	•••	34,891	18,202	16,689	43 94	40,085	21,608	18,477	50 48
1895	***		34,012	17,683	16,329	42 83	31,671	17,084	14,587	39 88
1896		•••		ł	14,155	1	l	1	14,491	
1897		•••		1	11,422	1		1	15,496	
1898		***			15,180		1		11,974	
1899	•••				19,001	Ì	25,713			
1900	***	•••			14,305	ł	22,286			
	***	•••			-		1			
1901	•••	•••			16,307		27,213			
1902	•••	••			19,781	Ì	_ ^		15,162	
1903	•••	••	39,499	20,465	19,034	50 64	29,393			
1904	• •	***	43,192	22,263	20,929	55 37	27,574	13,822	13,752	35 35
1905		••	40,125	20,832	19,293	51 44	37,218	18,209	19,009	47 72
1906	•	•••	42,447	22,174	20,273	54 42	47,176	22,573	24,603	60 48
1907	•	•••								
1908	•••	**								
1909	•••	•••								
1910	••	•••								
1911	•••	***								
1912	••	•••								
1913	•••	•••								
1914	•••	•••								
1915		•••								
1916	***	•••								
1917	***	•••								

^{*} The rates from 1891 to 1900 are calculated from the returns of the 1891 census.

Table IV .- Deaths according to cause.

				r	otal deatl	ns from-		
	Year.		All causes	Plague	Choleia.	Small- pox.	Fever.	Bowel com- plaints
	1		2	3	4	5	6	7
1891			20,658	•••	10	77	17,354	1,367
1892	•••		28,350	•••	1,767	5	23,095	737
1893			26,696	***	119	67	21,804	1,183
1894	•••		40,085	•••	871	11	33,538	1,869
1895	•••		31,671		885		26,951	1,367
1896	•••		31,887		901	454	26,838	964
1897			32,285		227	4,222	23,926	1,191
	***		25,633		19	46	21,818	733
1898	***	•				5	22,307	522
1899	•••	•••	25,713	•••	468			1
1900	•••		22,286		70	4	18,784	637
1901	•••		27,213		446	3	21,832	949
1902	***		31,456	1	532	51	25,616	775
1903	***		29,393	7	163	431	23,461	637
1904	•••		27,574	1,200	233	602	20,186	414
1905	•••	•••	37,218	7,394	49	71	24,390	509
1906	4.	•••	47,176	4,263	2,096	138	35,255	441
1907	•	•••						
1908	•••							
1909	***	***						
1910	•••	•••			1			
1911	••	***			1			
1912	***	•••						
1913	•••	••					ł	
1914	• •	140			1	1		
1915	***	***		1				
1816	400	***						
1917	160	•••		1				

Table V.-Statistics of cultivation and irrigation, 1313 fashi.

								Cultivated	ed			
Pargana and tahsil	il	Total area	Waste	Cultur-		Jı	Inngated					Double-
o					Total	Canal.	Wells	Tanks	Other	Ş	rotal,	3.7
T		2	٩	4 0	õ	9	7	×	9	10	111	1.2
		Acres	Acres	Acres	Acres	Acres	Aeres	Acres	Acres	Acres	Acies	Acres.
Biinor	•	68,702	8,042	12,427	188		172	13	e	48,045	48.233	5612
Dalanagar		63,408	7,047	14,416	129		367	110	194	41,274	41,945	3,118
Mandawai	:	64,226	10,366	11,082	161		152	2	63	42,617	42,778	4,806
Chandpur	•	43 672	2,236	7,857	1,265		1,083	182	2	32 314	33 579	2,359
Bashta		01,,10	0,010	T00,007	4,100		10,67	24	07	0±0,69	44°C, [4	2,020
Tahsil Bijnor	:	307,726	33,504	65,843	5,083		4,525	341	217	203,296	205 377	18,218
		160,166	14,555	93,130	3,517	176	270 95	22.4	3,049	48,964	52,481	7 909
Akbarabad	: .	36,714	4,056	5,623	321	297	77	4	9	26,714	27,035	4,407
Tahsil Najibabad		253,608	25,593	108,676	3,978	473	878	7.1	3,055	115,361	119,339	16,561
Nagina		62,750	7,059	8,967	8,052	7,725	236	51	40	38,672	46,724	8,304
Buhapura	:	112,193	11,570	66,445	222	119	95	ο 1 5	တ [33,956	34,178	3,982
Alzaigarn	:	110,888	#61'61	03,113	310	7	210	o f	ò	#0,10£	4,001	9,010
Tahsil Negina		290,331	33,823	128,525	8,590	7,844	242	96	103	119 393	127,953	21,902
Dham pur	:	100,792	14,784	22,199	7,031	4,266	2,361	361	43	84,778	63,809	
Seohara		65,500	7,044	12,644	2,504	13	1,890	317	284	43,308	45 812	8,288
Burh pur		41,456 85,859	5,560	7,102	12,989	3 864	1,279	175 784	725	53,180	30,634 66,169	8,095
J		200,00	22262	20111	2006	3006	22,6		2	20260		6
Tahsil Dhampur		293,607	51,048	56,075	24,233	8,153	13,146	1,637	1,297	182 251	206,454	31,857
District Total	•	1,145 272	123,968	359,119	41,884	16,470	18,597	2,145	4,672	620,301	662,185	88,538

, , , , , , , , , , , , , , , , , , ,		;											
- 1			Rabi							Khanf.			
Total.		Wheat.	Gram alono.	Barley alone and mrxed	O ₁ 1.	Mısur.	Total.	Rice	Bajıa and arhar	Maıze.	Uld, mung and moth.	Cotton	Sugar- c me.
	<u>′</u>												
778,63		12,330	8,140	33,100	1,253	916	84,130	23,511	23,392	1,125	10,093		12,278
53,155		11,963	4,641	31,769	871	388	87,600	22,767	23,671	871	10,253		15,020
43,075 *		13,000	* 72#	*,707	007 ±	700	130,339	25,566	39,613	230,1	14,057	7.175	15,341
12,827		24,447	8,938	54,032	1,000	496	130,721	27,313	42,904	3,160	19,617		17,254
94,192		26,017	8,848	53,775	1,901	419	132,376	25,460	43,400	2,647	19,646		17,804
99,397		28,301	10,768	53,952	24,54 000 4)TG	129,286	20,803	47,252	2,190	20,106		17,305
94,461		28.936	9.783	51.018	136	539	131 393	24.392	45,102	1.934	14,505		20,312
				<u> </u>			1		· · · · · · · · · · · · · · · · · · ·	, ,	· ·		2016-7
						,,							

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No returns on account of census operations

* No returns on account of census operations.

TABLE VI-(continued).—Area in acres under the principal crops, Tahsil Najibabad.

	Sugai-	1,859 15,585 11,028 11,028 14,402 2,199 5,112 5,639
	Sug	
	Cotton	2,318 6,160 8,160 8,210 9,201 9,205 9,391
	Urd, mung and moth	3,318 6,00770 6,004,4,4,0037 6,0037 7,44,0037 1,0031
ıf	Marze	107 265 130 601 624 269 269 269 262
Khanf	Bayıa and aıhar.	2,353 4,230 8,536 6,397 6,444 7,052 6,322 6,322
	Rice	24,962 46,008 46,881 49,529 51,975 89,112 35,008 41,626 34,095
	Total	49,069 88,183 79,472 83,228 84,968 80,123 80,213 80,213
	Masu	763 462 55 668 714 654 616
	Oil-seeds.	3,531 3,579 3,439 4,336 5,618 7,811 2,242
Rabı	Barley lone and	16,497 11,828 *,1925 16,151 14,729 13,007 12,942
R	Gram	7,831 4,356 8 13 8,552 6,804 10,211 8,696
	Wheat	23,326 24,588 19,255 *,24,190 26,572 30,704 27,234 27,234 26,813
	Total.	58,060 83,325 83,959 \$1,786 55,506 62,374 64,898
	Year.	Fash. 1805 1806 1806 1808 1808 1818 1818 1818 1818 1818 1818 1818 1818 1818 1820 1822 1823 1825

Table VI—(continued),—Area in acres under the principal crops, Taheil Nagina.

-		
The state of the s	Sugar- c ne	13,205 6,512 6,411 13,128 11,103 14,765 12,318 14,110
	Cotton.	6,759 5,084 4,085 10,310 11,921 11,921 7,957 10,178 11,844
	Uid, mung and moth	2,704 2,652 2,372 3,030 3,117 5,118 4,327 4,327
Kharıf.	Матге	3,335 1,036 1,036 2,918 3,4 14 2,517 2,632
Kh	Bigra and aihai	727 302 197 1,193 1,658 1,673 1,673 2,380 2,380
	Влев.	62,096 45,008 83,328 49,378 52,051 50,050 42,490
	Total	95,669 48,208 88,816 92,269 91,829 79,829 83,246
	Masuı.	2,150 1,018 ** 379 * 2,264 2,265 1,798 1,339
	O ₁ I- seeds.	2,556 2,047 1,113 4,805 6,999 3,375 3,375
Rabı.	Barley, alone and mixed	11,124 7,637 5,997 * 13,589 11,718 10,147 9,061
Ra	Gram, alone	4,020 2,522 730 4,615 6,289 8,445 10,249 8,372
	Wheat,	18,025 17,603 15,897 ** 33,254 31,150 37,417 34,792 35,475
	Total	41,416 34,631 26,38 2 4 59,370 72,875 70,503 65,885
	Year.	Fash
		1306 1306 1308 1308 1310 1311 1318 1318 1318 1318

* No retuins on account of census operations

TABLE VI—(concluded).—Area in acres under the principal crops, Tahsil Dhampur.

Fear. Total. Wheat alone. Gram. alone. John. alone. Masur. alone. Masur. alone. Total. alone. Masur. alone. alone. alone. Masur. alone. alone					Rabı.	bı.					1	Kharıf			
Fash. G2421 20.427 8.221 24.92 1,784 105,821 63,930 2,825 3,588 3,482 6,698 52,292 21,618 4,692 28,529 1,471 766 104,408 62,477 3,084 2,044 4,288 6,604 45,682 21,614 ** <th></th> <th>Year.</th> <th>Total.</th> <th>Wheat alone.</th> <th>Gram alone.</th> <th>Barley alone and mixed.</th> <th>O₁l-seeds.</th> <th>Masur,</th> <th></th> <th>Rice.</th> <th>Bajıa and aıhar</th> <th>Marze</th> <th>Uld, mung and moth,</th> <th>Cotton</th> <th>Sugar.</th>		Year.	Total.	Wheat alone.	Gram alone.	Barley alone and mixed.	O ₁ l-seeds.	Masur,		Rice.	Bajıa and aıhar	Marze	Uld, mung and moth,	Cotton	Sugar.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		Fash.													
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	10	:		20,427	8,221	24,026	2,492	1,784	105,821	63,930	2,825	3.538	3.432	6 698	17 305
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	e i		52,292	21,618	4,692	28,829	1,471	994	104,408	62,497	3,034	2,044	4,288	6,604	17,760
83,757 33,254 11,167 30,056 3,231 1,568 145,370 10,071 4,188 7,552 11,703 90,668 35,27 15,477 29,778 3,024 1,652 145,050 75,407 12,442 5,056 7,562 11,703 90,668 35,827 15,477 29,778 1,652 14,652 14,652 14,652 14,667 13,667 13,667 13,862 11,203 90,438 40,367 18 682 28,336 4,853 1,567 16,778 10,872 3,477 5,902 10,885 96,728 40,569 17,930 27,411 1,667 1,549 140,790 61,794 13,003 4,259 7,331 11,999	<u>~ 0</u>	. :	43,682	21,614	383	15,022	651	187	104,002	65,052	2,755	1,985	2,885	6,112	17,450
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5	. :	83,757	33,254	11,167	30.056	3.231	1.568	146,325	73.347	10,071	4,188	7,516	10,764	23,104
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	٥	•	. 90,668	35,827	15,477	29,778	3,024	1,652	148,050	75 405	11,001	4.056	7,365	11 906	25,040
$\begin{array}{cccccccccccccccccccccccccccccccccccc$:	103,091	40,413	17,596	31,925	4,540	1,452	134,283	49.966	16,980	4,649	8 994	8 301	04 490
96,728 40,669 17,930 27,411 1,667 1,549 140,790 61,794 13,003 4,259 7,331 11,999	c 4		99,438	40,367	18 682	28,336	4,353	1,557	151,411	76,778	10,872	3,477	5,902	10,001	27,405
	ω.	:	. 96,728	40,569	17,930	27,411	1,667	1,549	140,790	61,794	13,003	4.259	7,331	11 999	97.00
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* No retuins on account of census operations

Table VII.—Criminal Justice.

	ınder—	Everse Act.	15	15 9 9 9 27 12 14 14 14 14 14 14 14 14 14 14 14 14 14
	Cases under-	Opium Act	14	
		Reeping the peace	13	22 22 23 25 25 25 25 27 27 27 28 28 21 28 21 28 28 28 28 28 28 28 28 28 28 28 28 28
-fo	F	Lsad liveli- hood	12	15 14 13 13 13 10 13 13 13 13 13 13
n respect		Cuminal Gespass	11	212 295 86 744 125 84 78 103 120 63 63 63
Number of persons convicted or bound over in respect of—	Receiv-	ing stolen propei- ty.	10	0.44 0.44 0.44 0.44 0.44 0.44 0.44 0.44
rod to bot	_	Robbery and ducorty	6	422 422 423 423 423 444 444 444 444 444
из сопутс		Theft	8	285 503 112 112 1125 1125 106 95 78
of perso		force and assault	4	20 191 10 11 11 27 27
Number		Cattle- theft.	9	2424 244 244 244 244 244 244 244 244 24
		Rape	5	; Hu u o o 4 H
		Offences Grievous affecting hurt hfe.	4	20 119 22 22 31 10 10 11 11 11 15 15 13
		Offences affecting life.	89	88 84 777 131 62 63 63 64 45 9
	Offences	public tran- quillity (Chapter VIII).	8	7.0 120 120 120 882 882 84 106 47 47 66 66 66 66 66
		Ү евл.	1	1896 1897 1898 1800 1900 1901 1905 1906 1906 1907 1908 1919 1911 1913 1914 1916

Table VIII .- Cognizable Crime.

			Numbe gate	r of cases d by polic	investi-	Nun	nben of p	ersons—
	Year		Suo motu.	By orders of Magis- trate.	Sent up for trial	Tried	Acquit- ted or dis- charged	Convicted.
	1		2	3	4	5	6	7
1891			1,458	22	598	862	248	614
1892		4	1,336	44	492	842	305	537
1893			1,110	82	436	637	237	400
1894	•••		1,056	44	479	694	201	493
1895		•••	1,254	63	597	938	341	597
1896	•••		1,268	50	619	994	304	690
1897	•••		1,402		777	1,184	266	918
1898	•••		766	45	417	709	280	429
1899	•••		853	50	499	923	341	582
1900			1,101	50	661	1,153	357	796
1901	***		917	51	465	644	218	426
1902	•••		1,193	95	573	749	285	464
1903	•	•••	1,204		534	755	239	494
1904	•••		1,118		538	883	274	580
1905	•••	•••	1,404		338	550	202	348
1906			1,132		321	620	202	418
1907			881		353	525	166	359
1908		•••						
1909	•••	•••						
1910	***	•••						
1911	•••	•••						
1912	•••	•••						
1913	•••	•••					1	
1914	•••	•••						
1915	•••	•••						
1916	•••							
1917	•••	***						

Note.—Columns 2 and 3 should show cases instituted during the year.

Table IX.—Revenue demand at successive settlements.

				Ye.	ar of sett	lement.		
Pai gana.		1802	1805	1808.	1831— 40.	1866 73	1896 — 1903	
1		2	3	4	5	6	7	8
		Rs.	Rs.	Rs	Rs	Rs.	Rs	
Daine		62,969	64,989	79,186	98,554	87,310	1,10,851	
Bijnor Daianagar		55,715		62 887	73,564	65,352	88,154	
Daranagar Mandawar	***	48,239	48,759				82,245	
Chandpui		56,541	57,193	45,755	94,211	1,11,865	66,457	
Bashta	•••	17,487	19,570	24,074	40,291	51,545	49,604	
Tahsıl Bıjnoı		2,40,951	2,46,644	2,69,944	3,71,474	3,85,329	3,97,311	
Najibabad		74,422	74,526	79,668	75,498	85,352	1,00,994	
Kıratpur		89,056	88,892	83,412	88,596	86,830	1,02,260	
Akbarabad		46,251	45,215	47,011	57,166	48,985	60,191	
Tahsil Najiba	bad	2,09,729	2,08,633	2,10,091	2,21,26 0	2,21,167	2,63,445	
Nagina	.,	91,111	91,982	1,02,408	1,11,991	1,30,128	1,37,798	
Burhapura	•••	16,025	17,412	27,758	29,211	29,042	38,227	
Afzalgarh		1,10,161	1,11,010	1,19,053	1,03,464	1,07,783	1,07,678	
Tahsil Nagina	a	2,17,297	2,20,404	2,49,219	2,44,666	2,66,953	2,83,703	
Dhampur		99,059	1,02,863	1,03,757	1,19,836	1,27,585	1,79,418	
Seohara		64,969	1		77,631	72,287	95,615	
Nihtaur		52,077	54,800	52,408	70,512	63,920	91,898	
Burbpur	***	30,849	31,136	31,725	43,109	45,788	1,54,951	
Tahsil Dham	pur	2,46,954	2,45,611	2,41,210	3,11, 088	3,09,580	5,21,882	
District Tota	.1	9,14,931	9,21,292	- 9,70,464	11,48,488	11,83,023	14,66,341*	

^{*} Net demind.

Table X.—Present demand for revenue and cesses for the year 1313 fasli.

	W		1		Ī		den		ре -	er
Pargana and tahsil.	Where included in Ain-i-Akbari	Revenue	Cesses	Total.		ulti			rot.	ıl
1	2	3	4	5	_	6		_	7	
		Rs	Rs	$\mathbf{R}\mathbf{s}$	Rs.	a	р	R	s.a.	р.
Bijnor	Bijnor	1,10,929	11,104	1,22,033	2	8	6	1	12	5
Dalanagar	Jhalu and	88,154	8,822	£6,976	2	5	0	1	8	6
Mandawar	Bijnoi Mandawai	82,245	8,260	90,505	2	1	10	1	6	6
Chandpui	Chandpur and Gandaui	66,457	6,893	73,350	2	2	11	1	10	10
Bashta .	Azəmpur and Gandaur.	49,604	5,172	54,776	1	4	11	0	12	11
Tahsil Bijnor		3,97,389	40,251	4,37,640	2	1	7	1	6	9
Najibabad	Jalalabad	1,05,710	11,513	1,17,223	2	3	9	0	11	9
Kıratpuı	Knatpur	1,06,371	10,710	1,17,081	2	15	0	2	1	0
Akbarabad	Akbarabid	62,927	6,318	69,245	2	9	0	1	14	2
Tahsıl Najib- abad		2,75,008	28,541	3,03,549	2	8	8	1 -	3	2
Nagina	Nagina	1,37,615	14,452	1,52,067	3	4	1	2	6	9
Barhapura	Islamabad	37,093	6,409	43,502	1	4	4	0	6	2
Afzalgarh	Sherkot and Nagina	1,07,388	10,743	1,18,131	2	8	2	1	0	5
Tahsil Nagina.		2,82,096	31,604	3,13,700	2	7	 2	1	1	3
Dhampur	Sheikot	1,71,849	17,228	1,89,077	2	15	5	1	14	0
Seohara	Seohara and Sahaspur.	94,770	10,827	1,05,597	2	4	11	1	9	9
Nihtaur	Nihtaur	86,532	8,719	95,251	3	1	8	2	4	9
Burhpur	Chandpur and Azampur.	1,21,416	14,779	1,36,195	2	0	11	1.	9	7
Tahsil Dhampur		4,74,567	51,558	5,26,120	2	8	9	1	12	8
District Total		14,29,060	1,51,949	15,81,009	2	6	2	1	6	1

Table XI.—Excise.

		-																						
shops	muiq O	18	23	24	77	2 2	2 12	22	23	24	0 0	0 6	3 6	30	30	99	30	29						
Number of shops for sale of—	Drugs.	17	31	31	36	35	3 20	32	34	34	450	00	220	200	93	333	333	33						-
Num for	Country spirit.	16	90	90	88	χ α α	, 20 20 20 20 20 20 20 20 20 20 20 20 20 2	88	85	22.5	200	700	# c	200	၁ က	30	101	100						-
ecerpts popu- n-	.muiq0	1.6	Rs. 151	153	163	102	140	114	121	137	147	100	700	188	101	200	503	222				-		-
Incidence of receipts per 10,000 of popu- lation from—	Drugs	14	Rs 123	104	113	121	145	100	83	211	213	210	235	212	220	265	303	302						-
Inciden per 10	ronbry Zaibuloat Yand	13	Rs 469	375	428	445 709	491	269	376	466	302	412	452	040	665	479	755	743				*******		-
S	Total charge	12	Rs 1,744	2,798	2,673	2,220	1,466	1,529	1,366	1,074	1,209	1,000	1,000 1,000	2,788	2,02	1,754	1,560	1,527						
•ឧវ	Total receip	11	Rs.	50,181	56,044	57,949	62.530	45,404	53,925	64,868	56,130	65,633	69,620	72,971	77,509	72,723	97,507	97,631						
um.	nondunsno	10	Md s 28 24	28 33	90 08	77	0 6	27	20	11	77.	21. 55	77 77	21 5	20 27 3	22 10	23 37	$26 \cdot 16\frac{1}{2}$	1		-			-
Opium.	Total re-	6	Rs 11.994	12,183	12,958	12,896	11,086	9,131	9,855	10,883	10,313	14,711	14,313	14,526	14,690	15,428	16,080	17,099						-
	of —	8	fds. s lable.		31	43	38	6	0	87 22	3 0	3 5	20	7	20	18	23 36	21 16					-	-
Drugs.	Consumption in maunds of— maunds of— maunds of— care	7	Md. s. Mds. Not available	Ditto.			:		:	•		:	-	•	:	:		:				-		-
	Total re-	9	Rs. 9,790	8,270	9,030	9,033	11,500	7,932	6,588	9,540	10,070	10,100	18,100	10,340	16,920	20,401	23,269	23,287						-
a ina m	Receipts fro	50	Es.	: .	:	:		: :		:			20	:	:	:								-
	Consumption anollag ni	4	11.638	10,135	12,390	14,194	11 537	7,242	10,957	13,843	0,880	2,008	07,1,11	12,093	13,280	14,754	18,594	17,714						
Country spirit.	Recei pts.	3			33,804			28,339			35,221	52,101												_
morf.	Recerpts foreign liq	22	Rs.	9	196	9 8	3 &	22	09	09	:		î	6/,	210	342	514	220						
	Year.	1	1890-91	1891-92	1892-93	1893-94	1894-39 1808-96	1896-97	86-7681	1898-99	1899-1900	1000-001	1901-02	1902-03	1903-04	1304-05	1302-06	1906-07	1907-08	1908-09	1909-10	1910-11	1912-13	

Table XII.—Stamps.

				Re	ceipts from	[
	_	_					Total
)	Tear		Non- Judicial.	Court fee including copies	All sources	charges.
The state of the s		1		2	3	4	5
				Rs	Rs	Rs	Rs
1890-91		• •		26,279	74,633	1,01,118	3,178
1891-92	***			27,936	76,109	1,04,263	2,715
1892-93				28,509	80,904	1,09,745	2,952
1893-94		•		28,907	93,673	1,22,779	3,428
1894-95			, .	29,491	98,295	1,27,950	3,076
1895-96	•••		***	31,922	1,01,261	1 33,486	2,611
1896-97				30,337	95,937	1,26,461	2,436
1897-98		••		29,255	1,01,497	1,32,123	2,872
1898-99				29,707	1,13,062	1,44,128	2,529
1899-1900				30,844	1,07,234	1,39,869	2,513
1900-01				35,011	1,09,090	1,45,355	2,547*
1901-02				32,079	1,14,773	1,48,061	3,790
1902-03			•	34,117	1,16,728	1,52,034	4,272
1903-04			•	37,476	1,11,803	1,50,281	3,979
1904-05	•••			33,507	1,16,581	1,51,023	4,908
1905-06			•	40,061	1,27,677	1,68,646	4,356
1906-07			•	38,206	1,21,636	1,60,637	4,856
1907-08					}		
1908-09							
1909-10	•••						
1910-11	•••	•					
1911-12		,	••				
1912-13	••						
1913-14				.			
$1914 \cdot 15$.			
1915-16	***			,			
1916-17			,	.			
1917-18				.			
Carren				1		<u> </u>	

^{*} Discount only.

Table XIII.—Income-tax.

			Collected by panies.	Collected by companies.	Profits of companies.	its of com- panies.	Oth	Other sources, Part IV.	8, Part IV			Objections under Part IV	ns under
Year		Total			4 2002		Under Rs	3 2,000	Over Rs	2,000	Total charges		
		4	Assessees.	Tax	Asses-	Tax	Asses-	Tax	Asses-	Tax.		Number filed	or part- ly suc- cessful
1		27	3	4	5	9	7	8	- 6	10	I	12	13
		Rs		Rs.		Rs		Rs		Rs	Rs		
1890-91	:	33,501	•		:	:	1,012	16,596	150	14,298	414	445	353
1609 03	:	32,814	********			:	1,040	10,130	150	13,439	362	342	300
1893.94	:	55,241 39,739				;	980	16.0%	103	19,212	428	295	218
1894.95	: :	34.948	-		. :	: :	045	16,231	164	15 186	202	287	17
1895-96	:	34,873				:	863	14,725	185	17,869	25.25	100	7 6
1896-97	i	35,829	:				888	15,015	193	18,793	118	412	67
1897-98	:	30,785	······································			•	825	14,768	138	12,455	32	349	142
1898-99	:	30,581					874	14,433	144	13,439	ນລ	397	144
1899-1900	•	30,610					608	14,121	147	13,242	330	403	113
1900:01		31,250			•		201	13,200	164	14,704	22	336	252
1902-03	:	31,411. 31,896		•		•	600	13,040	166	14,925	436	1,131	22
1903-04		94,130					905	14,00,41 0,00,00	140	13,090	င္တန္	303	202
1904-05		25,067					300	8,659	130	12,002	150	176	77 G
1905-06		26,390	;	٠ ;	;	. :	300	8,374	161	15,168	978	05T	96
1906-07	•	26,654		; •	: .		323	8,922	154	14,663	744	195	000
1907-08	•					.,			1	-	7	COT I	FF O
60-8061	:												
1909-10	:												
1910-11													-
1911-12	:												***************************************
1912-13	:												
1			The second secon	***************************************		-	-					1	

Table XIV.—Income-tux by Tahsıls (Part IV only).

,			.,~						
	r	'ahsıl E	ıjno	r.		Ta	hsıl Na	jiba	bad.
Year		der 2,000.		Ove1 2,000	Year.		der 2,000		Over 2,000.
	Assessees	Tax	Assessees	Tax	, VIII.	Assessees	Tax	Assessees	Tax
1	2	3	4	5	1	2	3	4	5
1890-91 1891-92 1892-93 1893-94 1894-95 1895-96 1896-97 1897-98 1899-1900 1900-01 1901-02 1902-03 1903-04 1904-05 1905-06 1906-07 1907-08 1908-09 1909-1910	296 288* 297 237 248 247 253 217 238 230 231 219 234 82 76 66 87	Rs 4,998 4,679 4,912 4,792 4,391 4,472 4,836 4,145 4,290 4,135 4,096 3,813 4,152 2,391 2,238 1,817 2,439	51 52 53 49 54 52 57 42 47 50 53 49 40 33 31 38 30	Rs 4,586 4,241 4,484 4,284 4,557 4,480 5,024 3,429 3,949 4,077 4,392 3,962 3,250 2,831 2,658 3,341 2,647	1890-91 1891-92 1892-93 1893-94 1894-95 1895-96 1896-97 1897-98 1898-99 1899-1900 1900-01 1901-02 1902-03 1903-04 1904-05 1905-06 1906-07 1907-08 1908-09 1909-1910	305 456 295 201 290 221 214 277 247 233 197 212 208 87 83 86 93	Rs 4,248 4,708 3,912 4,907 4,960 3,727 3,412 4,629 4,037 3,828 3,174 3,575 3,742 2,315 2,313 2,524 2,630	20 22 24 23 27 52 54 12 20 20 24 28 23 25 30 45 38	Rs. 2,265 2,636 2,593 2,466 2,614 5,322 5,637 1,824 1,916 1,914 2,156 2,430 2,159 2,256 2,764 4,082 3,527
1910-11					1910-11 1911-12 . 1912-13 . 1913-14 1914-15 1915-16 . 1916-17 1917-18 .				

Table XIV.—Income-tax by Tubsils (Part IV only).

	2,000 E 2,000 5 Rs 3,295 3,064 2,983 2,693 2,750 2,744 2,4°4	1 1890-91 1891-92 1892-93 1893-94 1894-95 1895-96 1896-97	200 114 210 202 221	Rs 3,832 3,620 3,374 3,282 2,646		2,000 2,000 XEL 5 Rs 4,152 3,998 4,153
4 8 35 89 34 90 34 45 33 34 31 99 29 55 28 86 28	5 Rs 3,295 3,064 2,983 2,693 2,750 2,744 2,404	1 1890-91 1891-92 1892-93 1893-94 1894-95 1895-96	200 114 210 202 221	3 Rs 3,832 3,620 3,374 3,282	44 42 42	5 Rs 4,152 3,998
88 35 89 34 90 34 45 33 34 31 99 29 55 28 86 28	Rs 3,295 3,064 2,983 2,693 2,750 2,744 2,404	1890-91 1891-92 1892-93 1893-94 1894-95 1895-96	200 114 210 202 221	Rs 3,832 3,620 3,374 3,282	44 42 42	Rs 4,152 3,998
89 34 90 34 45 33 34 31 99 29 25 28 36 28	3,295 3,064 2,983 2,693 2,750 2,744 2,4°4	1891-92 1892-93 1893-94 1894-95 1895-96	114 210 202 221	3,832 3,620 3,374 3,282	42 42	4,152 3,998
33 28 35 28 75 30 44 30 33 29 36 28 37 29 45 29 36 33	2,314 2,087 2,541 2,583 2,628 2,781 2,462 2,531 2,574 2,797	1897-98 1898-99 1899-1900 1900-01 1901-02 1902-03 1903-04 1904-05 1905-06 1906-07 1907-08 1908-09 1909-1910 1910-11 1911-12 1912-13 1913-14 1914-15 1915-16 1916-17 1917-18	221 241 185 189 191 160 185 181 75 82 80 79	3 646 3,727 3,412 3,308 3,298 3,395 3,120 3,216 3,057 2,102 2,271 2,188 2,117	52 54 56 53 49 57 59 53 49 49 49 53	4,205 5,264 5,322 5,633 4,888 5,488 4,710 5,574 5,905 5,500 5,313 5,187 5,171 5,681
1	5 29	5 29 2,574	29 2,574 1905-06 1906-07 1907-08 1 1908-09 1909-1910 1910-11 1911-12 1912-13 1913-14 1 1914-15 1 1916-17 .	29 2,574 1905-06 80 1907-08 . 1908-09 1909-1910 1910-11 1911-12 1912-13 1913-14 . 1914-15 . 1916-17 .	2,574 1905-06 80 2,188 2,797 1906-07 79 2,117 1907-08	29 2,574 1905-06 80 2,188 49 1907-08 . 1908-09 1909-1910 1910-11 1911-12 1912-13 1913-14 . 1914-15 . 1915-16 1916-17 .

Table XV.—District Board.

				Receipts	ts						摄	Expenditure	am				
Year	Educa- tion	Medı-	Scien- tifie, &c	Mıs- cella- neous	Civil	Pounds	Ferries	Total expen- diture.	Contil- butions to Pro- vincial funds	General administra.	Educa-	Med 1-	Scien- tific, &c	Mis- cella- neous	Cıvil woıks	Pounds Debt	Debt
I	7	က	4	5	9	7	œ	6	10	III	12	13	14	15	16	17	18
	Rs	Rs	Rs	Rs	Rs	Rs	Ks	Rs	Rs	Ks	Rs	Rs	Rs	Bs		lis	Ks
1890-91	4.527			230	4,022	4,993		86,741		1.120	23,050	9.152		1,645	443		:
1891-92	4,604			237	29	5,197		85,960	•					1,243			
1892-93	4,873			282	44			73,032		1,241	24,907			1290			:
1893-94	5,046		:	355	55			71,017		1,211	25,234 10,745	10,745		1,335			•
1894-95					22			74,638		1,206		10,148	222	1,211		•	
			80		2,031			71,943	•	1,345	25,112	10,793		381			
76-981	5,967							74,476		1,419	27,059	10,874		379			
1897-98	6,135			2,021		3,350		76,762		1,450	26,630	9,713	677	•	38,292	•	
66-8681	7,029								1,000	1,884	27,771	9,426			35,014		08'9
1899-1900	7,455	3,570	85	2,05	2,260	* 6,942	-1-			1,910	29,193 10,731	10,731		28	46,007		65
1900-01				က				-		2,086	829,62	10,103		20	49,452		
1901-02	10,084		285	:				1,03,690	000'9	2,000	31,710	8,621	1,151	23	52,701	1,445	
1902-03	11,128							1,31,921	11,026		35,158 11,418	11,418		56	69,653		
1903-04	12,340							1,27,494		2,190	38,698	14,340		200	69,047		:
1004-05	11,189	4,689		20				718,021		2,479	2,479 36,787 15,352	15,352		170	71,905		ত্য
1905-06	10,841		234				9,518	1,59,636		2,728	42,542 15,562	15,562		493	94,631		105
1906-07	11,300				5,312			1,45,482	:	3,317	46,507 17,241	17,241	1,806	641	73,346		380
1907-08																	
1908-09																	
1909-1910.																	-
1910-11																	
1911-12							-										
1912-13																	-
T.T-OTET		_		_	_	_				_				_			_

* Formerly net receipts only were shown. From this year receipts and also expenditure are given 4 From this year the gross receipts from forries were for the first time credited to the District Board

Table XVI.—Municipality of Bijnor.

	Total	18	Rs	0,658	3,413	0,6,6	8 877	1,157	0.663	0,975	7.	305	4,031	1,575	203	6,734	17,064	17.858				-			Minnel
	Other Tc	17	Rs	047	1,090	1,42,	147 1	496	392 1	342	937 1	765	7007	100	347	9,015	2000								
		+	Rs 1				185 1			377					-				-						-
***************************************	Public in- struc- tion.	16													1.168		, ,	-							-
	Public nn- works struc-	15	Rs.	3,67	1,16	2,34	3,93	1,47	1,28	1,483	1,86	1,79	2.90	1,84	767	2.53	2,56	1,681							
Expendituie	Hospi- tals and Public dispen- sailes	14	₹ 83 83 83	280	332	300	300	300	334	300	316	735	716	929	989	713	989	669							The second second second
Expe	Con- ser- vancy	13	Ks 2,538	2,313	2,172	2,171	3,529	3,073	2,947	3,116	3,025	2,865	3,593	3,566	3,031	3,965	4,449	5,706							-
	supply tinage Main- ten- ance.	12	Къ 18	158	288	505	029	302	228	222	246	ż	101	350	448	327	189	192							
	Water-supply and drainage Capi- Main- tal ance.	1	Rs :		847		:				06				٣		529			_					
	Public safety	10	Rs 1,456	1,353	1,052	2 131	2,262	2,440	2,380	2,355	2 346	2,423	2 44S	2, 365	2,387	2,421	1,686	2,578							-
	Administration and collection of	в	Rs 1,480	1,553											2,480			2,987							1
	Total	8	Ks 9,583	9,450	10.739	12,172	11,385	10,743	10,320	11,099	12,407	12,179	14,102	14,709	16,665	17,148	18,465	18,622							
	Other sources	7	Ks 2.163	1,753	1,930	2,102	1,982	1,917	1,855	2,205	2,358	1,800	1,672	2,103	3,244	3,248	4 256	4,576							
	Loans	9		. :		:													~~~						
Income	Rents Loans	5	Rs.	506	280				_	331	-		-	_	757	1,040	1,019	888							
In	Other taxes.	4	Ks			1,004	358	994	401	530	947	421	909	704	603	651	1,304	1,013				***. row man			
	Tax on houses and lands	က	Rs 112	:	•	:		:		:		:	:					:							
	Oction	22	Rs 7.278	7,431	7,377 8,434	8,787	8,766	7,556	7,692	8,633	8,891	9,612	11,187	11,118	12,061	12,209	11,886	12,144							
	Year.	1	1890-91	1891–92	1893-94	1894-95	1895-96	1896-97	1897-98	1898-99	1888-1800	1900-01	1901-02	1902-03	1903-04	1904-05	1905-06	1906-07	60-70e1	1909-1910.	1910-11	1911-12	1912-13	1914-15	

Table XVI.—Municipality of Chandpur.

Year Cotroi Houses Other Loans Collection Safet Said Sai				In	Income.								Expenditure.	hture.				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Yea1.		Tax on houses	Other					Admin- istia- tion and		Water- and dre	supply	Con-	Hospi-	Public		Other	
1 2 8 4 6 7 8 9 10 11 12 13 14 15 16 17 18 Rs		Octroi	and lands	taxes.	Kents	Loans	somces		collec- tion of taxes.		,		ser.	dıspen- sarıes.	works		heads	Total
$\begin{array}{cccccccccccccccccccccccccccccccccccc$]	2	3	4	5	9	7	x	D.	97	11	12	ГЗ	14	15	16	17	18
1890-91 1890-92 1890-92 1890-92 1890-92 1891		Rs	Rs.	Rs.	ks.	Rs	Rs	Rs			Rs	Rs	B	Rs	Rs	lis	Rs	Rs
891-92 6,614 130 713 7467 1,521 1,155 122 1,101 300 2,513 210 73 1,221 1,156 1,004 311 31 7,83 1,27 1,156 1,004 31 1,564 300 2,435 401 750 883-34 1,11 860 8,228 1,283 1,684 27 30 2,426 1,335 300 2,426 1,335 300 2,428 1,984 401 800 2,428 1,984 401 800 2,428 1,884 300 800 4,426 1,984 401 800 2,428 1,884 401 800 3,404 1,488 1,884 300 800 4,428 1,984 401 800 4,438 1,984 401 800 3,404 1,488 1,884 8,284 1,188 1,884 1,884 1,884 1,884 1,884 1,884	16-0681	6,164	•	•	22	:	754	6,940			314	34	1,162	330	1,384	210	704	6,48
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1891-92	6,614			130	:	713	7 457				125	1,101	300	2,813	210	725	7,65
1893-94 7,503 111 614 8,228 1,283 1,674 270 30 1,335 300 2,742 198 401 1893-95 7,077 111 864 8,003 1,304 97 1,305 300 94,24 198 408 1896-97 129 840 8,003 1,369 94 1,305 300 94,145 197 451 1896-97 120 120 6,368 1,369 94 1,305 300 94,145 197 454 1897-98 6,797 120 746 1,389 56 1,347 197 451 1897-100 7,228 1,889 1,787 1,899 197 1,465 1,995 451 1,905 197 1,905 1,905 1,905 1,905 1,905 1,905	1892-93	6,334	:	:	124	:	731	7,189			٠	212	1,204	313	1,546	198	657	6,54
1894-95 7,077 86 840 8,003 1,203 1,264 300 942 198 4,28 1895-96 7,640 860 1,804 1,804 97 171 1,416 300 4,145 197 4,45 197 464 1896-97 7,640 105 620 7,522 1,196 1,306 56 1,234 300 1,317 197 464 1898-99 7,124 105 974 8,218 1,462 1,773 56 1,324 800 1,317 197 461 161 161 161 161 161 161 <td< td=""><td>1893-94</td><td>7,503</td><td></td><td>•</td><td>111</td><td></td><td>614</td><td>8,228</td><td></td><td></td><td>270</td><td>30</td><td>1,335</td><td>300</td><td>2,742</td><td>198</td><td>401</td><td>8,23</td></td<>	1893-94	7,503		•	111		614	8,228			270	30	1,335	300	2,742	198	401	8,23
1895-96 1,640 1,11 1,11 1,11 1,416 1,851 1,804 1,468 1,804 1,816	1894-95	7,077		:	98		840	8,003				15	1,264	300	942	198	4.28	6,03
1896-97 5,399 129	1895-96	7,640	;		111	:	853	8,604			97	171	1,416	300	4,145	197	454	10,05
1897-98 6,797 105 620 7,522 1,196 1,908 56 1,234 300 860 213 500 1898-99 7,124 120 744 7,73 25 1,734 25 1,734 25 1,734 25 1,734 25 1,734 25 1,734 25 1,734 25 1,734 25 1,735 1,908 466 380 540 320 1900-01 7,208 166 929 8,248 1,737 464 999 642 1,010 1901-02 8,266 156 1,66 1,871 477 208 1,397 464 999 642 1,010 1902-04 1,748 1,874 4,77 208 1,387 468 2,381 669 446	1896-97	5,399	:		129		078	6,368			:	94	1,305	300	1,317	197	461	98,9
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	86.768I O	6,797	:		105		620	7,522			:	26	1,234	300	860	213	200	6,26
1899-1900 6,355 151 746 7,252 1,589 1,890 6 77 1,428 3.47 819 66 77 1,428 3.47 819 66 77 1,428 3.47 810 354 608 1900-01 7,708 106 929 8,243 1,787 1,892 120 1,425 466 380 540 329 1900-02 8,266 156 692 8,981 1,891 176 464 499 642 1010 1902-03 7,748 156 9,989 1,871 477 208 1,877 485 3,911 622 784 1904-05 8,462 191 1,775 225 1,766 479 1,105 465 3,211 608 5,079 468 3,562 519 1,572 1906-06 9	66-8681 27	7,124	:	:	120	:	974	8,218			:	25	1,351	320	1,002	197	455	6,58
7,208 106 929 8,243 1,787 1,829 120 1,425 456 380 640 329 8,266 136 687 9,089 1,831 1,832 22 1,766 464 999 642 1,010 8,220 165 2,426 10,776 1,980 1,987 812 1,907 479 1,105 8,462 139 1,775 10,376 1,987 897 1,727 485 3,811 608 655 9,906 1,96 3,347 13,449 3,387 651 127 605 2,079 485 1,707 527 1,389	1899-1900	6,355	:		151	:	746	7,252			9	22	1,428	347	810	354	603	7,10
8,266 136 687 9,089 1,881 1,692 22 1,766 464 999 642 1,010 7,748 165 2,426 1,860 1,871 477 208 1,874 438 2,981 622 784 8,462 139 1,776 10,786 1,984 397 1,727 485 2,981 6203 784 8,462 139 1,776 10,376 2,289 1,887 397 1,727 485 3,211 608 655 2,079 485 3,211 608 655 2,079 485 1,707 527 1,389 9,906 1,067 13,449 3,887 651 127 605 2,079 485 1,707 527 1,389	10-0061	7,208	:	:	106	:	929	8,243			:	120	1,425	456	380	540	320	6,810
7,748 155 692 8,595 1,860 1,871 477 208 1,397 438 2,981 622 784 8,220 150 2,426 10,796 1,884 812 1,906 479 1,105 491 2,033 9,103 191 1,375 1,259 1,807 891 1,777 485 3,811 608 655 9,906 1,3449 3,387 651 1,27 468 3,562 519 1,572 1,777 1,3449 3,387 651 127 605 2,079 485 1,777 527 1,389 1,3449 3,387 651 127 605 2,079 485 1,777 527 1,389 1,3449 3,387 651 1,777 605 2,079 485 1,777 527 1,389	1901-02	8,266	:	•	136		687	680'6			:	22	1,766	464	666	642	1,010	8,17
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1902-03	7,748	:	:	155		692	8,595		-	477	208	1,397	438	2,981	622	784	10,63
8,462 139 1,775 10,376 2,259 1,807 397 1,727 485 8,211 608 655 1,903 191 1987 13,449 3,387 651 127 605 2,079 485 1,707 527 1,339 3,347 13,449 3,387 651 127 605 2,079 485 1,707 527 1,339	1903-04	8,220			150		2,426	10,796			;	812	1,906	479	1,105	491	2,053	10,68
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1904-05	8,462	•		139		1,775	10,376			:	397	1,727	485	3,211	809	655	11,14
. 9,906 196 3,347 13,449 3,387 651 127 605 2,079 485 1,707 527 1,339	1905-06	9,103	:	:	191	•	1,087	10,381		1,156		231	1,454	468	3,562	519	1,572	11,07
1907-08 • 1908-09 • 1908-09 • 1909-10 • 1910-11 • 1911-12 • 1918-13	1906-07	9,306			961		3,347	13,449		651	127	605	2,079	485	1,707	527	1,339	10,90
1908-09 1909-10 1910-11 1911-12 1912-13 1913-14	1907-08																	
1909-10 . 1910-11 1912-13 1913-14	1908-09																	
1910-11 1911-12 1912-13 1913-14	1909-10																	
1911-12 1912-13 1913-14	1910-11					_												
1912-13 1913-14	1911-12																	
1913-14:	1912-13																	
	1913.14																	

Table XVI.—Munisipality of Nanbabud.

				Income	ne							Expen	Expendituie.				
								Admi- nistia- tion	Public	Water-supply and drainage	upply nage		Hosp	Public	Public 1n-	Other	104.1
Year,	Octa oa	and lands	Cuner taxes	Rents	Loans	Other	Total	and collec- tion of taxes	safety	Capı-	Main- ten- ance	ser-	1	works	struc- tion	heads	10041
1		30	7	5	ء	7	8	9	10	11	12	13	14	15	91	17	18
T.	3 2	عاد	3 2	,	,		2	Ra	Rs.	33	Rs	Rs.		Rs	ES.	Ks	PAS PAS
	10 000	155		200	Trs.	9966	15 167	9.633	2,947	09	358	2,867		3,663	47.5	1,221	15,014
(890-91	15,823	•		2 8	-	2,462	14,796	2,427	2,421	2,740	987	2,469	575	2,871	463	1,110	15,562
26-1681	15,013	•		3 6		9,379	14,648	2,236	2,878	1,037	397	2,461		3,318	540	2 094	15,517
92-93	14,45			3 8		9,370	16,559	2,515	3,178	1,094	314	2,695		2,084	848	1,234	14,546
#0.00 0.00	14.487		•	88		2,330	16.847	2,364	3,418	792	369	4,030		2,433	852	1,742	16 584
25 F 00	14.090			000		9,713	16,772	2,609	4.243	1,387	143	2,937		1,911	892	1,895	16,592
06-06	19,010		-	000		9,340	14,391	3,428	4,049	79	104	3,542		2,773	924	1,754	17,264
	11,009	:	•	1 10	•	9,194	13,161	2,385	3,961	:	85	3,226		883	930	1,197	13,253
00 00	19,684	:	:	20.00		2,887	15,606	2,807	3,926	175	198	3,100		673	973	1,463	13,801
1000-1000	14,158	:	. :	32	•	2,827	17,017	2.873	3,815		83	2,995		974	1,009	1,342	13,684
00-01	12,664	•	: •	124		2,707	15,495	2,758	4,188	20	198	3,008	753	1,594	1,152	972	14,699
100	17,807			123	•	2,244	20,174	2,620	4,665	933	33	3,118	731	137	1,239	3,819	17,327
77-07 10-03	19,549	:	•	108	• ;	3,176	22,833	4,708	4,340	55	304	3,315	200	5,877	1,242	2,203	22,750
	20,386	:	•	114	: :	4,935	25,435	6,119	5,061		C13	5,064	765	5,659	1,453	3,642	28,406
4.05	19 171	: :		121	•	5,158	24,450	5,694	3,871		277	5,355	749	2,875	1,626	2,001	22,718
1905-06	23,372			118		3,812	27,302	4,835	3,081		394	4,546	750	4,970	1,695	3,102	23,373
20-90	21,264	•	-	125	•	7,832	29,221	5,187	1,674		994	4,935	848	3,235	1,695	o ⁵ 03o	23,003
80-20																	
60-80			_														
9-10																	
0-11																	
1-12																	
2-13																	
1913-14																	
21-4				-	-			-					_		-		

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XVI.—Municipality
TABLE

Public safety Water-supply canned diamage and diamage tall Contains and diamage served and diamage served and diamage tall Contains and diamage served and diamage served and diamage tall Contains and diamage served and diamage served and diamage tall Contains and diamage served and diamage served and diamage tall Contains and diamage tall Disposition of the diamage tall	Inc	Income	ŀ						-	Ex penaicui e	reme				
Total collect collec						Admin- istra- tion	Public	Water-s and dra	upply mage		Hospi-	Public	Public in-	Other	
Ro 9 10 11 12 18 14 15 16 17 Rs Is Is Rs Rs <td>Rents Loans</td> <td>ans</td> <td></td> <td></td> <td></td> <td>collec- tion of</td> <td>safety</td> <td></td> <td>Main- ten-</td> <td></td> <td>Dispen- saries.</td> <td>Works</td> <td>strue- tion</td> <td></td> <td>lotal</td>	Rents Loans	ans				collec- tion of	safety		Main- ten-		Dispen- saries.	Works	strue- tion		lotal
Ks. Its Hs. Hs. <td>5 6</td> <td>9</td> <td>+</td> <td>7</td> <td>x</td> <td>6</td> <td>10 -</td> <td>П</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>12</td>	5 6	9	+	7	x	6	10 -	П	12	13	14	15	16	17	12
13,546 2,222 3,286 445 195 3,398 779 4,145 266 873 11,738 2,064 2611 110 176 2,779 284 2,074 278 878 11,738 2,364 2,611 110 176 2,779 483 1,818 878 878 13,067 2,316 2,693 66 2,967 688 2,663 687 1,417 812 13,067 2,462 2,903 115 2,765 568 2,867 206 845 13,409 2,765 2,967 115 2,755 508 2,667 1,417 86 1,462 2,076 845 1,417 1,417 1,417 2,775 1,417 2,074 1,417 1,417 2,074 1,417 2,074 1,417 2,074 1,417 2,074 1,417 2,074 1,417 2,074 1,417 2,00 818 2,00	Rs Ks	SS	i	Ks		Ks	Rs.	Ks	Rs	Rs	Кs	Кs	Кs	Ks	Кs
11,738 2,064 2,611 110 170 2,773 254 2,504 271 11,738 2,502 35 2,957 483 1,819 372 812 13,056 2,462 2,963 66 2,967 66 2,967 206 845 13,056 2,462 2,963 102 2,967 60 2,967 206 845 13,067 2,765 2,776 115 2,775 60 1,998 200 1,217 13,676 2,776 115 2,775 60 1,998 200 845 10,609 2,776 115 2,775 60 1,998 200 1,217 12,405 2,476 127 2,762 649 958 808 12,405 2,926 3,312 127 2,682 649 958 875 14,162 2,927 4,696 890 1,890 875 1,890 875 1,890 14,162 3,218 1,99 2,26 849 658 810 652 1,890 14,162 3,10 1,4				759		2,232	3 258	445	195	3,398	709	4,145	266	873	15 521
13,067 2,197 2,024 31 2,805 31 2,805 31 2,805 34 2,805 34 2,805 345 2,663 345 365 3,805 845 845 3,805 845 845 808 808 808 808 808 808 808 808 808 808 808 808 808 809 808 809 808 809 809 808 809 808 809 808 809 809 808 809 809 809 808 809 809 809 809 809 809 809 809 809 809 809 809 809	16	:		1,139		2,064	2,611	077	97.1	2,773	402	2,074	8/7	878	11 204
13,056 2,452 2,963 3,182 70 102 2,575 505 1,998 200 1,217 13,056 2,501 3,182 70 102 2,575 505 1,998 200 1,217 10,609 2,755 3,698 2,868 1,452 2,926 3,312 127 2,862 649 1,452 205 808 1,016 3,218 2,926 3,318 2,928 3,181 1,016 3,218 2,928 3,181 1,016 3,218 2,928 3,181 1,016 3,218 2,929 3,218 2,218	1.7			805	13,738	2,197	2,624		3 60	2,805	536	2,653	637	1.417	12,964
13,675 2,801 3182 70 102 2,575 505 1,998 200 1,217 12,409 2,755 3,786 115 2,755 549 206 808 12,409 2,755 3,698 127 2,765 549 206 808 14,622 2,926 3,812 127 2,862 649 958 340 875 11,015 3,521 3,298 1,89 2,539 1,489 958 340 875 11,016 3,521 3,298 2,539 1,489 958 340 875 11,016 3,521 3,586 20 3,589 1,489 873 1,890 8778 1,890 18,916 3,190 3,122 1,637 4,069 890 1,705 843 2,478 18,916 4,818 1,246 23,122 1,537 4,382 870 2,407 1,481 2,274 <td>14.</td> <td></td> <td>_</td> <td>986</td> <td>13,056</td> <td>9.459</td> <td>2,002</td> <td>:</td> <td>99</td> <td>2,967</td> <td>508</td> <td>2,867</td> <td>206</td> <td>845</td> <td>12,874</td>	14.		_	986	13,056	9.459	2,002	:	99	2,967	508	2,867	206	845	12,874
12,409 2,705 3,776 115 2,752 510 2,089 808 10,609 2,755 3,698 170 2,765 494 1,452 205 818 11,622 2,725 3,698 127 2,862 649 958 340 875 11,015 3,551 3,298 127 2,862 649 958 340 875 11,015 3,551 3,586 1,89 879 8,589 663 578 1,890 875 14,116 3,616 3,176 143 107 3,139 881 810 653 1579 18,916 3,182 220 356 4,069 890 1,705 843 2,478 18,916 4,819 3,586 1,464 113 4,601 870 1,970 23,429 4,578 1,246 23,122 1,537 4,382 870 2,407 1,481	:	:		1,035	13,675	2,801	3 182	20	102	2,575	505	1,998	200	1,217	12,650
10,609 2,755 3,698 170 2,765 494 1,462 205 958 12,405 2,465 3,688 12,7 2,615 503 647 200 918 14,622 2,318 12,7 2,636 647 200 818 11,015 3,21 3,298 18 207 3,539 958 340 875 13,854 3,923 3,181 138 209 3,539 989 663 578 14,116 3,616 3,70 143 107 3,197 851 896 773 1,008 18,916 3,618 2,20 356 4,069 873 1,706 843 2,478 18,916 3,578 1,494 132 5,561 873 2,478 2,478 23,428 1,246 23,122 1,537 4,382 870 2,407 1,481 2,274 39,860 4,578 <td></td> <td></td> <td></td> <td>1,614</td> <td>12,409</td> <td></td> <td>3,776</td> <td>•</td> <td>115</td> <td>2,752</td> <td>510</td> <td>2,089</td> <td>500</td> <td>808</td> <td>12 961</td>				1,614	12,409		3,776	•	115	2,752	510	2,089	500	808	12 961
12,405 2,485 3,568 60 2,515 503 649 587 200 818 14,622 2,925 3,312 127 2,862 649 958 340 875 11,016 3,221 3,181 138 209 3,359 1,888 810 652 1,820 14,116 3,616 3,170 143 107 3,197 851 896 773 1,008 18,267 3,930 3,182 220 356 4,069 890 1,705 843 2,478 18,916 4,819 3,608 1,706 843 2,478 1,008 23,429 4,281 1,249 1,537 4,382 870 2,693 890 1,970 39,860 4,578 1,246 23,122 1,537 4,382 870 2,407 1,481 2,274	.4			1,166	10,609				170	2,765	494	1,452	205	898	12,497
14,622 2,925 3,312 127 2,862 949 958 340 87,51 11,015 3,298 3,298 138 20) 3,559 1,88 810 652 1,890 13,854 3,298 3,181 138 20) 3,559 1,88 810 652 1,820 14,116 3,616 3,170 143 107 3,197 851 896 773 1,008 18,267 3,930 3,132 220 356 4,069 890 1,705 843 2,478 18,916 4,819 3,858 1,494 132 5,851 800 2,993 1,970 23,429 4,578 1,246 23,122 1,537 4,382 870 2,407 1,481 2,274 39,800 4,578 1,246 23,122 1,537 4,382 870 2,407 1,481 2,274	55			1,298	12,405				09	2,515	503	647	200	818	10,796
13,854 3,281 3,288 1,459 1,459 989 003 1,859 1,859 1,859 1,859 1,859 1,859 1,859 1,859 1,859 1,859 1,850 1,870 1,8	27			1,360	14,622	2,925		:	127	2,862	0450	808	040	ZZ.	12,048
14,116 3,123 3,181 158 207 3,593 150 0.0 10 0.5 1,503 14,116 3,170 3,182 220 356 4,069 890 1,705 843 2,478 18,916 4,819 3,568 1,494 182 6,581 800 2,093 890 1,705 843 2,478 23,429 4,246 2,233 1,494 182 5,851 860 2,093 890 1,970 39,860 4,578 1,246 23,122 1,537 4,382 870 2,407 1,481 2,274	- 82			1,479	11,015		3,238	,	20 00	2,538	1,468	900	000	2/0	12,895
14,116 3,616 3,170 143 107 3,197 851 896 778 1,108 18,967 3,930 3,182 220 356 4,069 890 1,705 843 2,478 18,916 4,518 2,233 1,494 132 5,351 860 2,693 890 1,570 39,860 4,578 1,246 23,122 1,537 4,382 870 2,407 1,481 2,274	21			854	13,854		3,181	138	200	9,00,0	00(:	010	200	0.50,7	10,080
18,267 3,930 3,132 220 356 4,069 850 1,705 843 2,478 18,916 4,819 8,668 4,061 873 2,315 852 1,821 23,429 4,248 2,233 1,494 132 5,851 860 2,693 890 1,970 39,860 4,578 1,246 23,122 1,537 4,382 870 2,407 1,481 2,274	23			1,260	14,116			143	107	3,197	Sel	896	773	1,008	13,761
18,916, 4,819 8,568 40 11 4,601 873 2,315 852 1,521 23,429 4,248 2,233 1,494 182 5,351 850 2,693 890 1,970 39,860 4,578 1,246 23,122 1,537 4,382 870 2,407 1,481 2,274	:	:		2,954	18,267		_	220	326		038	1,705	843	2,478	17,623
23,429 4,248 2,233 1,494 132 9,851 860 2,693 890 1,970 39,860 4,578 1,246 23,122 1,537 4,382 870 2,407 1,481 2,274	13			2,745	18,916	4,819	_	40	11		873	2,315	852	1,821	18,900
39,800 4,678 1,246 23,122 1,537 4,382 870 2,407 1,461 2,274	20			5,673	23,429	4,248	_	1,494	132		860	2,693	830	1,970	19,871
	2			22,340	39,860		1,246	23,122	1,537		2/2	7,407	1,481	4,2,4	17,887

TABLE XVI.—Munucipality of Dhampur.

Other Rents Loans Sources Lo	1			Income.								EX	Expendituie	es			
Other Rents Rents Loans. Other Golden Public and profices of the collection of the	Tax on							Admin- 1stra- tion		Water-s and dra	supply inage	Con-	Hospi-				
Hs.	houses and lands.			Rents	Loans.	Other	Total.	and collec- tion of taxes	Public safety	Capi- tal	Mun. ten. ance	ser- vancy	tals and Dispan- salles			Other heads	Total.
Hs. Hs. <td>က</td> <td>+-</td> <td>4</td> <td>5</td> <td>9</td> <td>7</td> <td>8</td> <td>6</td> <td>10</td> <td>11</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td>	က	+-	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18
95 725 10,273 1,340 463 1,322 240 792 136 74 689 6,981 1,209 463 1,322 240 792 126 74 734 8,099 1,246 1,216 1,316 355 1,325 240 792 126 75 821 8,938 965 1,874 300 40 1,451 255 2,392 240 108 75 821 8,938 965 1,816 625 1,526 230 250 294 75 876 6,931 1,282 1,431 1,000 173 1,214 387 2117 239 108 600 1,310 625 1,52 220 1,315 230 1,305 280 380 381 108 6301 1,427 1,402 1,405 1,431 1,417 380 380 380 380 380 380 <td< td=""><td>Bs</td><td>۱.</td><td>ks.</td><td>Rs.</td><td>Ks</td><td>Rs</td><td>Rs.</td><td>ŀ</td><td>Ks</td><td>Rs.</td><td>Ks</td><td>188</td><td>R.S.</td><td>!</td><td>Rs</td><td>17.5</td><td>R.S.</td></td<>	Bs	۱.	ks.	Rs.	Ks	Rs	Rs.	ŀ	Ks	Rs.	Ks	188	R.S.	!	Rs	17.5	R.S.
44 689 6,991 1,209 463 1,322 246 792 126 74 670 6,285 1,246 1,868 1,017 94 1,256 245 980 108 75 821 8,988 965 1,875 313 255 1,312 294 1915 294 75 821 8,988 965 1,376 625 1,312 220 1,915 294 108 75 667 7,546 976 1,310 625 1,526 230 1,915 294 108 70 667 1,461 1,427 106 173 1,214 387 211 291 294 381 108 740 9,034 1,463 1,463 50 614 1,433 645 1,706 235 235 235 235 235 235 235 235 235 235 235 235	:		•	96	:	725	10,273	1,011	1,340	:	107	1.964	249		114	397	6.598
74 670 6,286 1,246 1,868 1,017 94 1,256 245 980 108 75 821 8,099 955 1,875 300 40 1,431 255 23,12 294 75 821 8,099 955 1,875 313 255 230 230 250 294 108 7,546 976 1,300 635 1,725 230 230 250 230 250 230 230 230 250 1,915 230 1,915 230 1,915 230 1,915 230 1,915 230 1,915 230 1,915 230 1,915 230 1,915 234 1,747 231 1,747 231 1,747 1,747 231 1,747 231 1,747 231 1,747 231 232 1,431 1,740 2,745 1,443 1,747 341 1,743 2,451 1,747 341 1,740				44	:	639	6,991	1,002	1,209	;	463	1,322	240		126	394	5,548
74 734 5,099 955 1,874 300 40 1,451 255 2,3,2 294 75 667 7,646 963 1,275 313 255 1,226 230 1,915 294 103 876 6,301 1,282 1,421 100 230 250 250 293 108 700 6,007 1,116 1,427 105 165 1,226 230 250 299 81 635 7,852 1,481 1,00 173 1,214 387 281 1747 341 81 635 7,852 1,483 1,403 1,596 451 1,699 383 240 7,746 1,483 1,491 614 1,433 645 1,747 341 281 857 1,465 1,429 1,596 450 1,335 38	:		:	74		029	6,285	1,246	1,868	1,017	76	1,256	245		108	202	7.321
75 821 8388 968 1,275 313 258 1,182 220 1,915 234 108 876 6,301 1,282 1,431 1,000 625 1,526 230 2500 293 108 876 6,301 1,282 1,431 1,000 1747 380 2500 293 108 774 6,907 1,143 1,000 1747 380 1,747 381 240 774 6,463 1,632 1,402 472 71 1,217 380 383 281 774 6,463 1,632 1,443 545 1,766 285 281 857 7,665 1,887 1,423 64 1,596 450 1,746 383 285 8,590 8,190 1,403 1,443 450 1,747 383 <	:			4.		734	8,038	955	1,874	300	40	1,451	255		294	350	7,821
75 667 7,646 976 1,310 625 1,526 230 2500 293 108 76 6,301 1,282 1,431 1,000 173 1,214 387 2117 238 108 700 1,131 387 2117 238 81 635 7,852 1,431 472 71 1,217 360 1,747 341 240 7,852 1,631 1,402 472 71 1,217 360 1,769 383 240 7,740 9,034 1,337 1,463 50 614 1,433 646 1,596 235 250 236 240 7,740 9,034 1,493 56 1,596 451 1,696 337 267 7,655 1,887 1,493 57 1,493 520 1,335 336 270 1,653 450 1,314 514 1,500 416 415				25	:	821	8,938	963	1,275	313	258	1,132	220		294	310	6,680
108 876 6,301 1,382 1,431 1,000 173 1,214 387 2117 2)3 108 70 6,007 1,116 1,427 105 165 1,377 860 1,747 341 81 736 1,163 1,442 171 1,217 380 980 383 240 774 6,453 1,363 1,443 545 1,747 345 240 774 6,453 1,502 1,493 64 1,533 545 1,747 345 281 857 7,655 1,897 1,493 207 1,653 450 1,335 336 267 8190 1,692 1,470 1,433 640 1,335 336 398 9,731 1,677 1,406 1,022 2,101 429 994 415 1 469 1,084 1,476 1,406	•			7.5		799	7,046	926	1,310	625	155	1,226	230		293	358	7,673
108	٠			103		876	6,301	1.282	1,431	1,000	173	1,214	387		2)3	381	8.278
81 635 7,852 1,402 472 71 1,217 360 980 383 240 . 774 9,034 1,337 1,463 50 614 1,433 545 1,706 235 281 . 774 6463 1,387 1,463 . 64 1,596 455 1,706 235 281 . 857 7,655 1387 . 207 1,653 450 1,335 336 298 8,190 1,692 1,427 . 114 1,740 428 3,991 427 469 . 1,369 1,1677 1,406 . 1,022 2,101 429 994 415 15 550 . 1,084 11,976 2,242 1,470 . 886 1,800 446 1,605 512 750 . 3,962 14,183 2,519 54,1 514 1,911 440 2,016 590 750 . 3,962 14,183 2,519 54,2 862 2,283 440 2,132 553 1				108		200	6,007	1,116	1,427	105	165	1.877	360	_	341	518	7,156
78 740 9,034 1,337 1,463 50 614 1,433 545 1,706 235 281 774 6,453 1,603 1,506 451 1,699 337 281 765 1,887 1,491 64 1,506 451 1,699 337 267 930 8,190 1,692 1,427 114 1,740 428 3,091 428 398 1,869 10,160 1,242 1,406 1,740 428 3,994 415 1 469 1,869 10,160 2,242 1,406 1,806 416 1,605 519 559 1,084 11,976 2,242 1,114 514 1,911 440 2,016 590 1 750 3,962 14,183 2,519 549 549 2,283 440 2,182 553 1	:			78		635	7,352	1,163	1,402	47.2	71	1,217	360		333	355	6,403
240 774 6,463 1,602 1,491 64 1,596 451 1,699 337 281 857 7,655 1,887 1,493 207 1,653 450 1,335 336 267 930 8,190 1,692 1,477 1,740 428 3,091 427 469 1,369 10,160 2,242 1,470 886 1,800 415 1,605 510 750 3,962 14,183 2,519 542 1,114 514 1,911 440 2,016 590 1 750 3,962 14,183 2,519 542 1,114 514 1,911 440 2,016 590 1	:		•	78		740	9,034	1,337	1,463	20	614	1.433	545		235	579	7.762
231 857 '',050 1,387 1,493 207 1,653 450 1,335 336 5267 2,589 9,731 1,672 1,405 1,022 2,101 4,29 9,731 1,677 1,406 1,022 2,101 4,29 9,94 415 1 1,004 1,369 10,160 2,224 1,470 1,800 1,904 11,976 2,224 1,470 1,800 416 1,605 10 1,005 11,91 1 1,032 1,101 4,40 1,911 4,005 10 1 1,005 1			:	240		47.7	0,403	1,502	1,491	:	64	1,596	451		337	472	7,612
267 930 8,180 1,692 1,427 114 1,740 428 3,591 427 469 1,022 2,101 429 994 415 1 1,750 1,389 10,100 2,242 1,470 836 1,800 416 1,605 512 1,0184 11,976 2,204 1,114 836 1,800 440 2,016 590 1 1,084 11,918 2,519 540 2,283 440 2,132 553 1 1,000 1,			:	731		/68	cco'/	1 387	1,493		202	653	450		336	758	7,610
398 2,589 9,781 1,677 1,406 1,022 2,101 429 9,994 415 1 469 1,369 10,160 2,242 1,470 886 1,800 416 1,605 512 559 1,084 11,976 2,204 1,114 514 1,911 440 2,016 590 750 3,962 14,183 2,519 543 862 2,283 440 2,132 553 1			448	267	:	930	8,190		1 427	:	114	1,740	428		427	878	797 0
469 1,869 10,160 2,242 1,750 1,502 4,16 1,605 559 559 10,160 2,242 1,176 2,204 1,11470 514 1,911 440 2,016 590 1 750 3,962 14,183 2,519 542 862 2,283 440 2,132 553 1	:	_	446	398		2,589	9,731	1,677	1,408	•	1 099	0,101	490		17	1 097	100.0
559 1,084 11,976 2,224 1,114 514 1,911 440 2,016 500 1 750 3,962 14,183 2,519 514 540 2,283 440 2,132 553 1	:		555	469	:	1,369	10,160	0,000	1,470	:	1,000	107,101	0.00E	_	210	470	100,0
750 . 3,962 14,183 2,519 543 . 013 1,511 440 2,132 553 1	:		522	559		1,084	11,976	0.00	1 114	:	5 1	1,000	440		200	1 199	5,00
000 751.5 UEP 000 0.00 0.00 0.00 0.00 0.00 0.00 0.0			202	750	•	3,962	14 183	4, c	1,11,1	•	#T0	1,711	OF 1	_	5 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1,104	10,001
								4,013	C#-C		700	2,203	44±0		900	1.4±4,1	10,130

Table XVII.—Distribution of Police, 1906.

				~				
Thana.		Sub- In- spectors	Head Con- stables.	Con- stables	Muni- cipal Police	Town Police	Ruial Police	Road Police,
1		$\overline{}$	3	4	5	6	7	8
Bijnor		2	1	12	24		110	10
Mandawar		1	1	9		8	92	
Amhera		1	1	9	•	7	74	4
Ganj		1	1	6		4	14	
Chandpur		2	1	12	20		136	2
Bashta		1	1	6			109	
Najibabad		2	2	15	36		120	10
Nagal	•	1	1	6			41	
Shampur		1	1	8			7	2
Kiratpur	••	2	1	12		16	132	2
Nagina	••	2	1	12	33		171	10
Barhapura		1	1	9			88	
Afzalgarh		1	1	12		8	86	
Rehar		1	1	6			41	
Dham pur		2	1	11	13		125	6
Sherkot	•••	1	1	7		17	54	
Nihtaur		1	1	12		12	145	
Seohara		1	1	8		12	134	2
Nurpur		1	1	9			97	2
Civil Reserve			14	61				
Armed Police		1	15	78				
Total	• •	. 26	3 49	320	126	84	1,770	5 50

TABLE XVIII.—Education.

		Total.		Seconda	y educ	ation	Primar	y educa	tion.
Year	Schools	Scho	olars	Schools	Sch	olars	0.11	Scho	lars.
	Col- leges	Males	Fe- males	Schools	Males	Fe- males	Schools	Males	Fe- males
1	2	3	4	5	6	7	8	9	10
1896-97	202	5,905	198	10	1,182	57	191	4,675	141
1897-98	182	6,675	299	10	1,236	64	171	5,401	235
1898-99	159	6,346	219	10	1,351	47	148	4,950	172
1899-1900.	213	8,314	540	10	1,472	43	202	6,803	497
1900-01	204	8,194	490	10	1,521	46	193	6,631	444
1901-02	199	8,337	433	9	1,592		189	6,688	433
1902-03	214	8,850	405	9	1,680		205	7,170	405
1903-04	202	8,812	584	9	1,836		193	6,976	584
1904-05	216	8,634	721	9	1,569		207	7,065	721
1905-06	233	8,999	725	10	1,711		223	7,288	725
1906-07	231	8,013	996	8	1,331		223	6,682	796
1907-08	226	8,058	981	9	1,632		217	6,426	981
1908-09									
1909-1910									
1910-11									
1911-12 .	•								
1912-13	•								
1913-14	•								
1914-14	•								
1915-16	.							1	
1916-17	.								
1917-18									

List of Schools, 1906.

-		, , , , , ,			
Fahsil	Pargana.	School.		Class.	lverage strend-ance.
	Bıjnor	Bijnoi Do Bankpur Gajraula		High School Middle Veinacular (Mission, Giils') Anglo-Veinicular Lower Primary, Grils' (Munic pal) Upper Primary, Aided. (Municipal) Lower Primary, Aided Ditto Ditto Ditto Ditto Unitto Unitto Chitto Chitto Chitto Unitto (Municipal) Lower Primary, Grils' Patwari School Upper Primary Ditto	228 233 58 24 46 21 21 21 15 11 25 14 28 28 35 31 63
Bijnor	Daranagar	Baqai pur Suaheii Do Mandaoli Bai auki Jhalu Do		Lower Pilmary Ditto Lower Pilmary, Aided Ditto Upper Pilmary Lower Pilmary, Aided Ditto . Lower Pilmary, Aided, Grils' Upper Pilmary Lower Pilmary	19 18 18 21 13 73 19 24 19 35 30 21 31
		Bazidpur Khari Bilai Umii Mandawar Do Do Do	****	Ditto Ditto Ditto Ditto Upper Primary Upper Primary Lower Primary Added Ditto Ditto Lower Primary, Aided,	14 14 25 43 26 75 30 21 25 15
	Mandawar			Guls' Upper Primary Lower Primary Lower Primary, Aided Ditto Ditto Ditto Ditto	75 24 26 22 9 13

List of Schools, 1906—(continued).

Tahsıl.	Pargana.	School.		Class.	Average attend- ance.
		Chandpur Do		Middle Vernacular (Municipal) Lower	137 21
		Do	***	Primary, Aided	21
		Do		Ditto	36
.		Do	101	Ditto	30
Bijnor—(concluded).		Siau	•••	Upper Primary Ditto	59
ide	Chandpur .	Sisauna	***	Ditto	47 54
cla		Ismailpui		Ditto	29
100		Masit		Lower Primary	19
ارې		Ganga Naglı		Ditto .	23
į		Rijaupur	•••	Lower Primary, Aided	32
ä		Qazi Shora Saindwar	••	Ditto Ditto	18
Bi		Pipli	•	T)-44.	38 16
			***	Ditto	10
		Bashta	••	Upper Plimary	52
	Bashta .	Rasulpur Nagla	•••	Lower Pilmary	19
	Bush ou) Imlia	••	Ditto	19
,		Gandaur	•••	Ditto .	19
,		/ Najibabad		Middle Vernaculai	137
1		Do		(Municipal) Lower	23
				Pilmary, Aided	
		Do	•••	Ditto	8
1		Do		Ditto	40 28
i		Do		Ditto	20
1		Do.	•••	Ditto	12
1	}	Do	•	Ditto	24
		Do	•••	Ditto	29
		Do	•••	(Municipal) Lower	37
19		Do		Primary, Aided, Girls'	91
	Najibabad .	Nagal	•••	Upper Plimary	21 46
Ď.		Sahanpur	•••	Lower Primary	59
Najibabad.]]	Jogipuia	•••	Ditto	17
ei.		Saidpuri	•••	Ditto	20
83	11	Sofatpur	300	Ditto	51
		Jalalabad	•••	Ditto	22
		Do	•••	Lower Pilmary, Aided Ditto	20 20
		Kashirampur	•••	Datte	19
		Puranpur	***	Ditto	70
		Shafiabad	407	Ditto	00
		Taharpur	***	Ditto	0.4
		Dhanseni	•••	Ditto	13
		Akbarabad	•••	Lower Primary	29
		Sıkandarpur Basi	***	Ditto	10
	Akbarabad	≺ Kumhera	•••	Lower Primary, Aided	14
		Umri		Ditto	. 20
		Ghazipur	•••	Ditto	. 21

List of Schools, 1906—(continued).

Tahsıl.	Pargana.		School.		Class.		Average attend- ance
		(Kırat		•••			115
		Do Do		•••	Lower Pilmary, Aid	- 1	21
- 11			• • • •	.	Ditto Ditto		26 20
		Do			Ditto		32
		Do			Ditto		18
		Do		-	Ditto		21
~ 11		Memo			Upper Primary		31
po:		Banel		1	$\mathbf{D}_1 \mathbf{tto}$		42
n		Sisau			Ditto	 E.C.	35
nol		Hasai	ra Kheii	.	Upper Primary, And Lower Primary	iea	33 20
00)		Khat	apur 8.1		Ditto		13
1)	Kiratpur		11 Khurd		Ditto	٠.	14
g		Sahal	puı		Ditto		22
ag		Tisot	ra		Ditto		21
11.			ida	•	Ditto	;;	17
Najibabad—(concluded)			durpur	•	Lower Primary, Ar	aea	25 23
		Chhi	pur Sukha tawar		Ditto Ditto		23
			nagar	· .	Ditto		11
		Luqn	anpur Basai		Ditto	٠.	33
1		Asgh	arı pur		Ditto		16
1		Budg			Ditto		25
1			mpur		Ditto	•••	29
		1 3 Wat	ı Kalan	•	Ditto	••	17
/		Nagi	na		Middle Vernacular		137
1		/ Do			(Municipal) Low	eг	36
					Primary.		
		Do		•	(Municipal) Low Primary, Aided.	er	37
		Do			Ditto	***	26
		Do		•	Ditto Ditto	•••	30
		Do		••	Ditto	•••	35
		Do			Ditto		38
		Do			Ditto		25
e d	Nagina	\ D	o		(Municipil) Low		34
Nagina,		D	. • •		Primary Aided, Gi		49
e (11	aini . gampur	• •	Upper Pilmary Ditto	•••	27
124			our Sadat	•••	Lower Pilmary		36
			pur Sadat	•••	Ditto	•••	18
			zarpur		Ditto	•••	2
		Sha	mspur		Ditto	•••	2
			ikhpura	••	Ditto	. 3. 3	19
			han pur	•••	Lower Primary, A		1 4.
		Man	manwala isuri		Ditto Ditto	•••	1 7
	11.			•••			
			hapura	•••		•••	
	Barhapura		Qadır	10 ***		***	0
	X I	C ous	h Alipur Kot	la	Ditto		

$List\ of\ Schools,\,1906$ —(continued).

Tahsil	Pargana,		School		Class.	Average attendance.
	Buhapura- (concluded)		Rasulpur Muzaffar Sarangwala		Lower Primary Lower Primary, Aided	21 15
Nagina-(concluded).	Afzalgarh .		Afzalgarh Do. Rehar Qasımpur Gaihi Ditto Jatpura Shahzadpur Udaipur Asafabad Muhammadp Rajauri. Nabka Mohi-ud-dinpur	 u r	Upper Primary Pieptratory, Aided Upper Pilmary Ditto Lower Pilmary, Aided, Gills'. Lower Pilmary Ditto Ditto Ditto Ditto Ditto Ditto Lower Primary, Aided	100 40 65 48 15 21 23 26 21 22 30 23
Dhampur.	Dhampur		Dhampur Do. Do. Do. Sherkot Do Do Do Do Do Analy a sarkara . Nindru . Padli Amkhera . Sedha Athain Sheikh Baschia Ubar Baschra Khurd Umar pur Asa Jot Heman Parmawala . Sheopuri Khushhalpur Hakimpur Narayan Lindarpur Khadaria Mankuha		Middle Vernacular (Municipal) Lower Primary (Municipal) Lower Primary, Girls'. (Municipal) Lower Primary, Aided. Middle Vernacular, Aided. Middle Vernacular, Aided. Lower Primary, Aided. Ditto Ditto Upper Primary Ditto	138 14 11 28 133 20 28 20 28 20 18 16 39 56 30 37 22 24 21 22 19 15 28 17 22 22 17 22 21 22 21 22 21 22 21 22 21 22 21 22 21 22 23 24 25 26 27 27 28 29 20 20 20 20 20 20 20 20 20 20
	Sechara .	{	Seohara Do	••• •••	Upper Primary , . Lower Primary, Aided	67 27

$List\ of\ Schools,\ 1906$ —(concluded).

Tahsıl	Pargana	School.	Class.	Average attendance.
	Š c o h a r a—) (concluded).	Scohara Do Do Do Do. Sahaspur Sipahiwala - Mahmudpur Kazimpur Bhogpur Lamba Khera Kiwar	Lower Plimary, Aided Ditto Ditto Ditto Upper Primary Lower Plimary Lower Plimary, Aided Ditto	24 15 44 20 50 18 30 17 25 25
oncluded)	Nihtaur	Nihtaur Do Do Do Begiaj pur Naqibpur Tii kaula . Phulsanda Alampur . Haigampur	 Middle Vernacular Lower Primary, Aided Lower Primary, Girls' Lower Primary Upper Primary Ditto Lower Primary Lower Primary Lower Primary Lower Primary Lower Primary, Aided Ditto	122 12 25 28 31 32 21 27 29 25
Dhampur—(concluded	Buihpur .	Taj pur Do. Nur pui Azam pur Pheona Monna Asghari pur Naik Nægla Majhaula Mangal Khera Taqi pur Teli pura Ratangarh Hasu pura Paijania Gauli Gohawai Do Rahu Nagli Singha Bhainsa Shujaat pur Haizar pur Bhat Khas pura	 Upper Primary Lower Primary, Grils' Upper Primary Ditto Ditt	74 21 44 43 55 53 46 19 25 21 19 26 20 34 23 24 27 34 26 21 17 32 23

ROADS, 1906

(i) Najibabıd to Kotdwara	AProvincial	aging spage of group of the constraint of the co		Miles	fur
B - Local	Unmetalled roads, bridged and drained	throughout			,
B - Local	(1) Najibabid to Kotdwara	• •		13	3.37
I.—First class roads, metalled, bridged and drained throughout (1) Bijnor to Muzaffainagar		Total		13	3 37
(1) Bijnor to Muzaffainagar	B-Local				
(ii) Bijnor to Nagina		d and drained			
(iii) Bijnor to Nagina 19 0 (iv) Bijnor to Najibabad [vide II(iii)] 1 0 0 (v) Rijnor station roads 1 605 0 <	(1) Bijnor to Muzaffainagar .				
(IV) Bijnor to Najubabad [vide II(III)]	(ii) Bijnor to Mediut	•			_
(v) Bijnor station roads 1 6 05 (vi) Nihtsur to Dhampur 7 6 (vii) Railway Station approach roads 3 1-92 Total 43 2-97 II.—Second class roads, unmetalled, partially bridged and drained (i) Bijnor to Moradabad 16 2 (ii) Bijnor to Nihtaur 16 2 (ii) Bijnor to Chandpur 20 0 (iv) Bijnor to Chandpur 17 0 (v) Haldaur to Nihtaur and Nagina 17 0 (vi) Dhampur to Nagina 10 0 Total .	(in) Bijnor to Naribuhad Faida II(iii)]	•••		1	
(vi) Nihtsur to Dhampur 7 6 (vii) Railway Station approach roads 3 1-92 Total 43 2-97 II.—Second class roads, unmetalled, partially bridged and drained (i) Bijnor to Moradabad 29 0 (ii) Bijnor to Nihtaur 16 2 (iii) Bijnor to Chandpur 23 0 (v) Haldaur to Nihtaur and Nagint 17 0 (vi) Dhampur to Nagina 10 0 (vi) Murpur to Tajpur and Seohaia 11 0 Total 126 2 III.—Fourth class roads, banked but not surfaced, partially bridged and drained. (vi) Nurpur to Tajpur and Seohaia 7 0 (ii) Bijnor to Ujalighat 3 0 (vi) Nagina to Kajgaihat and Rained 22 0 (ii) Bijnor to Ujalighat		••	-	1	
Total		***			
II.—Second class roads, unmetalled, partially bridged and drained		**			
(1) Bijnor to Moradabad		Total		43	2.97
(ii) Bijnor to Nihtaur		nally bridged o	ind		
(ii) Bijnor to Chandpur	(1) Bijnor to Moradabad	•••	•••	29	0
(vi) Dhampur to Nagina	(ii) Bijnor to Nihtaur	••	•••	16	2
(vi) Dhampur to Nagina	(111) Bijnoi to Najibabad [vide I(1v)]	••	***		-
(vi) Dhampur to Nagina	(1v) Bijnor to Chandpur	***		23	
(vi) Dhampur to Nagina	(v) Haldaur to Nihtaur and Nagin i	•••	•••	1	
Total	(vi) Dhampur to Nagina	•			
III.—Fourth class roads, banked but not surfaced, partially bridged and drained.	(vii) Nurpur to Tajpur and Sechaia	***	• •	11	
1 Bijnor to Daranagar		Total	***	126	2
(11) Bijnor to Ujalighat 3 0 (111) Nagina to Najibabad and Hildwai 36 0 (112) Nagina to Afzilgaih and Rehar 22 0 (12) Nagina to Kot Qadir and Kaulia 21 4 (12) Nagina to Balhapura 8 0 (12) Nagina to Kiratpur 15 0 (12) Nagina to Kiratpur 17 6 (12) Dhampur to Seohaia and Sahaspur 17 6 (12) Dhampur to Nurpur and Dhanaura 24 0 (12) Dhampur to Sherkot and Afzalgurh 12 0 (13) Dhampur to Sherkot and Afzalgurh 12 0 (13) Dhampur to Sherkot and Afzalgurh 22 4 (14) Haldaur to Dilanagar 9 0 (14) Daranagar to Chandpur load [H(lv)] 6 2 (14) Daranagar to Chandpur load [H(lv)] 6 2 (15) Nitaur to Chandpur and Bashta 21 2 (17) Najibabad to Nulpur 32 4 (17) Najibabad to Nulpur 32 4 (17) Najibabad to Nagal 8 0 (17) Rawallian to Najibabad station 2 (17) Rawallia		surfaced, parti	ally		
(ii) Bijnor to Ujalighat	(1) Bignor to Daranagar	•••	•••	7	0
(11) Nagina to Najibibad and Hildwai 36 (1v) Nagina to Afzilgath and Rehar 22 (v) Nagina to Kot Qadir and Kaulia 21 4 (vi) Nagina to Bathapura 8 (vii) Nagina to Bathapura 15 (vii) Dhampur to Scohala and Sahaspur 17 (ix) Dhampur to Nurpur and Dhanaura 24 (x) Dhampur to Sherkot and Afzalgarh 12 (xi) Haldaur to Ditanagar 9 (xii) Haldaur to Amhera, Chandpur and Amroha 22 (xiii) Daranagar to Chandpur load [H(iv)] 6 (xiv) Nihtaur to Chandpur and Bashta 21 (xv) Chandpur to Nurpur 9 (xvi) Najibabad to Nuipur 32 (xvii) Najibabad to Nagal 8 (xii) Babalgath to Nagal 8 (xxii) Babalgath to Nagal, Mandawar and Mandaoli 28 (xxii) Babalgath to Nagal, Mandawar and Mandaoli 28	(ii) Bijnor to Ujalighat	•		1	
(iv) Nagina to Afzilgaih and Rehar 22 0 (v) Nagina to Kot Qadir and Kaulia 21 4 (vi) Nagina to Balhapura 8 0 (vii) Nagina to Kiratpur 15 0 (vii) Dhampur to Seohala and Sahaspur 17 6 (ix) Dhampur to Nurpur and Dhanaura 24 0 (x) Dhampur to Sherkot and Afzalgurh 12 0 (xi) Haldaur to Dhanagar 9 0 (xii) Haldaur to Amhera, Chandpur and Amroha 22 4 (xii) Daranagar to Chandpur load [II(iv)] 6 2 (xiv) Nihtaur to Chandpur and Bashta 21 2 (xv) Chandpur to Nurpur 9 2 (xvi) Najibabad to Nuipur 32 4 (xvii) Najibabad to Barhapura 14 0 (xviii) Najibabad to Nagal 8 0 (xxi Sabalgaih to Nagal, Mandawar and Mandaoli 28 0 (xxi Barallear to Najibabad station 28 0	(111) Nagina to Najibabad and Hindwai	•••	•••	36	0
(v) Nagina to Kot Qadir and Kaulia (vi) Nagina to Balhapura	(iv) Nagina to Afzilgaih and Rehar			22	U
(v11) Nagina to Kiratpur 15 0 (v11) Dhampur to Seohaia and Sahaspur 17 6 (ix) Dhampur to Nurpur and Dhanaura 24 0 (x) Dhampur to Sherkot and Afzalgarh 12 0 (xi) Haldaur to Dhanagar 9 0 (xii) Haldaur to Amhera, Chandpur and Amroha 22 4 (xiii) Daranagar to Chandpur load [H(iv)] 6 2 (xvi) Nhataur to Chandpur and Bashta 21 2 (xv) Chandpur to Nurpur 9 2 (xvi) Najibabad to Nuipur 32 4 (xvii) Najibabad to Barhapura 14 0 (xviii) Najibabad to Nagal 8 0 (xix) Sabalgaih to Nagal, Mandawar and Mandaoli 28 0 (xx) Rawalher, to Najibabad station 0 0	(v) Nagina to Kot Qadir and Kauija			21	4
(v111) Dhampur to Seohaia and Sahaspur 17 6 (x) Dhampur to Nurpur and Dhanaura 24 0 (x) Dhampur to Sherkot and Afzalgurh 12 0 (xi) Haldaur to Dinanagar 9 0 (xii) Haldaur to Amhera, Chandpur and Amroha 22 4 (xiii) Daranagar to Chandpur load [II(iv)] 6 2 (xiv) Nihtaur to Chandpur and Bashta 21 2 (xv) Chandpur to Nurpur 9 2 (xvi) Najibabad to Nuipur 32 4 (xvii) Najibabad to Barhapura 14 0 (xviii) Najibabad to Nagal 8 0 (xxix) Sabalgaih to Nagal, Mandawar and Mandaoli 28 0 (xx) Rawalher, to Najibabad station 20 0	(vi) Nagina to Baihapura	•		8	O
(ix) Dhampur to Nurpur and Dhanaura 24 0 (x) Dhampur to Sherkot and Afzalgurh 12 0 (xi) Haldaur to Dhanagar 9 0 (xii) Haldaur to Amhera, Chandpur and Amroha 22 4 (xiii) Daranagar to Chandpur load [II(iv)] 6 2 (xiv) Nihtaur to Chandpur and Bashta 21 2 (xv) Chandpur to Nurpur 9 2 (xvi) Najibabad to Nuipur 32 4 (xvii) Najibabad to Barhapura 14 0 (xviii) Najibabad to Nagal 8 0 (xix) Sabalgaih to Nagal, Mandawar and Mandaoli 28 0 (xv) Rawallherr to Najibabad station 28 0	(vii) Nagina to Kiratpur		***	15	-
(xi) Dhampur to Sherkot and Afzalgurh (xi) Haldaur to Dinanagar (xii) Haldaur to Amhera, Chandpur and Amroha (xiii) Daranagar to Chandpur load [II(iv)] (xiv) Nihtaur to Chandpur and Bashta (xv) Chandpur to Nurpur (xvi) Najibabad to Nurpur (xvii) Najibabad to Barhapura (xviii) Najibabad to Barhapura (xviii) Najibabad to Nagal (xix) Sabalgaih to Nagal, Mandawar and Mandaoli (xxiii) Rajibalier to Najibabad station				17	6
(x1) Haldaur to Dhanagar 9 (x11) Haldaur to Amhera, Chandpur and Amroha 22 (x11) Daranagar to Chandpur load [II(1v)] 6 (x1v) Nihtaur to Chandpur and Bashta 21 (xv) Chandpur to Nurpur 9 (xvi) Najibabad to Nurpur 32 (xvii) Najibabad to Barhapura 14 (xviii) Najibabad to Nagal 8 (xix) Sabalgaih to Nagal, Mandawar and Mandaoli 28 (xxix) Bawalliar to Najihabad statoon 20	(ix) Dhampur to Nurpur and Dhanaura	***	•••		
(x11) Haldaur to Amhera, Chandpur and Amroha 22 4 (x11) Daranagar to Chandpur road [H(1v)] 6 2 (x1v) Nihtaur to Chandpur and Bashta 21 2 (xv) Chandpur to Nurpur 9 2 (xvi) Najibabad to Nui pur 32 4 (xvii) Najibabad to Barhapura 14 0 (xviii) Najibabad to Nagal 8 0 (xix) Sabalgaih to Nagal, Mandawar and Mandaoli 28 0 (xx) Rawalher, to Najibabad station 20 0	(x) Dhampur to Sherkot and Afzalgarl	ı ,. .		1	
(x111) Daranagar to Chandpur 10ad [II(1v)] 6 2 (x1v) Nihtaur to Chandpur and Bashta 21 2 (xv) Chandpur to Nurpur 9 2 (xvi) Najibabad to Nui pur 32 4 (xvii) Najibabad to Barhapura 14 0 (xviii) Najibabad to Nagal 8 0 (xix) Sabalgaih to Nagal, Mandawar and Mandaoli 28 0 (xx) Bawalhar, to Najibabad station 20 0	(xi) Haldaur to Dalanagar	***	••		
(xiv) Nihtaur to Chandpur and Bashta 21 2 (xv) Chandpur to Nurpur 9 2 (xvi) Najibabad to Nui pur 32 4 (xvii) Najibabad to Barhapura 14 0 (xviii) Najibabad to Nagal 8 0 (xix) Sabalgath to Nagal, Mandawar and Mandaoli 28 0 (xx) Rayualhar to Najibabad station 28 0	(XII) Haldaur to Amhera, Chandpur and	Amroha	***		
(xv) Chandpur to Nurpur 9 2 (xvi) Najlbabad to Nulpur 32 4 (xvii) Najlbabad to Barhapura 14 0 (xvii) Najlbabad to Nagal 8 0 (xix) Sabalgalh to Nagal, Mandawar and Mandaoli 28 0 (xx) Rawalbert to Najlbabad statton 28 0	(XIII) Daranagar to Unandpur 10ad [II(1v	[[
(xvi) Najibabad to Nuipur	(aiv) Nintaur to Chandpur and Bashta	***	•••		
(xvii) Najibabad to Barhapura 14 0 (xviii) Najibabad to Nagal 8 0 (xix) Sibalgaih to Nagal, Mandawar and Mandaoli 28 0 (xx) Bayalhari to Najibabad station	(xv) Chaudpur to Nurpur	•••	• • •	1	
(xviii) Najibabid to Nagal (xix) Sabalgaih to Nagal, Mandawar and Mandaoli (xx) Rawalber; to Najibabed station		•••	•••		
(xix) Sabalgath to Nagal, Mandawar and Mandaoli 28 0		•••	***	1	
(Tr) Rawalhari to Najihahad station	(xix) Sibilizable to Magai	35		1 -	_
(AA) INDIVIDUAL TO MAJINANAU STATION	(xx) Parallian to Nagai, Mangawar and	mandaol1	**		
	(vy) transment to walinapse sestion	***	•••	0	4

ROADS, 1906 - (concluded).

III.—Fourth class roads, banked but not surfaced, partially bridged and drained—(concluded).	Miles.	fur.
(xxi) Nagina to Sheikot and Kashipur (xxii) Kiratpui to Mindawar and Muzaffarnagar (xxiii) Hargampur to Bundki station (xxiv) Railway approach roads to Bilawali, Chandok and Barampui	24 12 1 0	0 0 4 7
Total .	355	7
IV Sixth class roads, cleared only		
(i) Bijnor circular road	8 13 7 15 10 5 16 77 616	3 6 4 1 6 6 4 6 4 4 0 2 1 34

FERRIES, 1906

River.	Name of Ferry	Vıllage	Pargana	Tahsil.	Manage ment	In- come
						Rs.
	Chandı	Chandı .	Nijibabad	Najibabid	District Board, Sa- haranpur.	
	Shishamwali	Kangri .	Do .	Do	Ditto	•••
	Balawah	Balawalı	Do	Do	District Board.	950
	Nagul	Nagal .	Do .	Do.	Ditto .	1,175
	Biruwala	Biruwila	Mandiwar	Bijnoi	Private	***
ses.	Arazi Taufir	Arszı Taufir	Do	Do ,	Ditto	***
Ganges.	Badshah pur	Badshahpur	Do .	Do	Ditto	***
	Raolı	Rıfiunnıgar	Do	Do	District Board	4,375
	Shabu wala	Shabirwala	Bıjnor .	Do	Private	***
	Jalalpur	Jalalpur	Do	Do	District Board	} 1,000
	Jahanabad	Jahanabad 📆	Daranagar	Do	Ditto)
	Jafarabad	Jafarabad	Bashta .	Do	Ditto	700
	Makhdumpur	Makhdumpur	Do	Do	Ditto	<i>,</i> , , , ,
	Birkhera	Barkhera	Afzılgırh.	Nagina	Ditto	95
şa.	Suawalı	Suawalı	Do	Do	Ditto .	150
Ramganga.	Salabatnıgır	Salabatnıgar	Do	Do	Ditto	145
Ram	Raini .	Sheikhpur Khaddar.	Dhampur	Dhampur	Private	***
	Bihari pur	Biharipur	Seohara .	Do.	Ditto	

POST-OFFICES, 1906

Tah-	Pargina		Locality.		Class	Management	
	Bijnor		Bijnor	***	••	Head office	
	Mandawar	{	Mandawar Bilawali Muhammad	• •	•••	Sub-office. Branch office. Ditto.	
Bijnor.	Daranagar	{	Haldıur Daranagar Jhalu		***	Sub-office. Branch office. Ditto	
	Chandpur		Chandpur		•••	Sub-office.	
	Bashta	. {	Bashta Gandaur	***	**	Branch office. Ditto.	
bad	Najibabad	. {	Najibibad Jalalabad Nagal Shampur	***	 	Sub-office Branch office. Ditto Ditto.	
Najıbabad	Kiratpur	{	Kıratpur Bısi Kotl Memon	 	•	Sub-office Branch office Ditto.	Impenal
L	Akbarabad	••	Akbarabad		•••	Ditto.	Imperial
. (Nagina	{	Nagina Pulaini	•••		Sub-office. Branch office.	
Nagina.	Barhapura	{	Baihapura Kot Qidir	***	***	Ditto. Ditto.	
	Afzalgarh	{	Afzalgarh Rehai	•••	•••	Ditto Ditto.	
1	Dham pur	{	Dhampur Sheikot Nindiu	••	••• ••	Sub-office. Ditto. Branch office.	
Dhampur.	Seohara	{	Seohara Sahaspur	•••	•••	Sub-office Branch office	
Ohan	Nihtaur	***	Nihtaur	***	•••	Sub-office.	
	Burhpur	{	Nui pur Tajpur Ratangarh	•••	•••	Ditto. Ditto. Branch office	

MARKETS, 1906

Tahsıl	Pargana.	Bazar.	Market days.
	Bijnoi	Bijnor, Polmerganj Do, Chak Shirin Batauki Umii Gajiaula Achpal	Monday and Wednesday Saturday. Monday Wednesday Friday.
	Daranagar {	Ganj Jhalu Haldaur Nagal	Monday and Friday. Ditto. Sunday, Tuesday, Thursday and Saturday. Friday.
Bijnor.	Mandawar {	Mandawar Muhammadpur Deomal Indarpui Rajrup urf Semla Baikatpur urf Khirni	Tuesday and Saturday. Thursday. Wednesday Monday.
	Chandpur {	Chandpur Ganga Nagla Sisauna Rajupur Bahman Paoti	Tuesday, Wednesday, Finday and Satunday. Tuesday and Finday. Monday, Saturday Wednesday
	Bashta {	Ajdeo Bashta Imlia Rasulpur Nagla .	Do Sunday. Monday. Thursday.
oad.	Najibabad (Najıbabad Muazzampur Tulsi Sahanpur Kabherı Nagal	Monday, Friday and Saturday. Monday and Thursday. Saturday Sunday and Thursday. Friday.
Najibabad	Kıratpar	Basi Kotla Barampur Banehra Sabal pur Budgari	Do. Sunday Monday. Wednesday. Thursday. Tuesday.
(Akbarabad .	Akbarabad	Do.
Nagina.	Nagina	Hargampur Mahmudpur Bhaunta Nagina Kotwali Roshanpur Partab Bhogli Rajupur Sadat Hempur Manak	Do. Do. Sunday and Thursday. Wednesday and Saturday. Ditto. Wednesday. Do. Do.

		MA	ARKETS, 1906—(conclude	ed).
Tahsıl.	Pargan	.0.	Bazar.	Market days.
	Nagina—(c o cluded).	n-{	Bedarbakhtpur Jadon Kalyanpur Khurrampur Kharak Fakhanpur	Thursday and Saturday, Monday and Friday, Sunday, Saturday,
luded).	Barhapura	{	Raipur Sadat Barhapura Nagla Ladha Kot Qadir	Saturday, Do. Monday, Sunday.
Nagina—(concluded)	Afzalgarh		Rehar Shahzadpur Gathwawala Mohsinpur Fazlabad urf Maniawala Afailgaih Qasimpur Gaihi Siibasachand Hasanpur Duli Chandpur Chandpur urf Udaipur Fatehalipur	Do. Do. Do. Do Monday and Thursday. Wednesday Do. Monday. Do. Thursday Wednesday and Saturday
	Dham pur	{	Tıbri Kotra Tappa Haveli Sherkot Allahdınpur Bhogi Sarkaıa Chatru Padlı Manda Fatelullahpur Burhannagar	Ditto Sunday and Thursday Ditto. Ditto. Friday. Do Tuesday and Saturday. Monday and Thursday
ur.	Seohara	{	Seohara Mahmudpur Maqsudpur Rawana Shikarpur Sheikhpur Khaddar Sahaspur	Ditto. Saturday. Do Do Tuesday Monday and Wednesday.
Dhampur.	Nihtaur	{	Nihtaur Musapur Sadı uddınnagar Nanhera Muzaffarpur Debidas	Monday and Friday. Tuesday. Saturday. Monday Thursday.
	Burhpur		Tajpur Nurpur Pheona Khaspura Tandhera Athain Pajanian Roshanpur Moina Jafarabad Korai Gohawar Jit	Sunday and Thursday. Wednesday. Do. Do Saturday. Do. Do. Monday. Sunday. Friday. Tuesday

TAIRS, 1906.

Tahenl.	Pargana,	Locality.	Name of fair,	Date.	Appro- Nuncte average attend- ance.
		, Do	Ramlila Burha Babu Mitan Shah Mu- hammad,	Kuar Sudi 10th Bhadon Badi 2nd Every Thursday	4,000 300 50
		Do	Neza Bile Salar	Last Wednesday in Chart.	150
	Bijnor	Do	Chhari Zahir Di- wan		2 50
		Suaheri Buzurg Suaheri Khurd Gajiaula Seo Jhalii	Ditto Ditto	Bhadon Badi 9th Bhadon Bidi 10th .	250 400 1,000 300
		Daranagar Ditto	Ganga Ashnan . Chham Zahir Di- wan.	Kartık Sudi 15th Sawan Sudi 9th	25,000 2,500
	Daranogar	Panta Jahanabad Sikandai pur Bamnauli	Ditto Ditto Bhaduin Nezi Ble Salai,		150 200 20,000 150
		Haldaur Sikandarpui Khaiak.	Gudri Debi-ka-mela .	Chart Sawan Sadi 3.d Each Monday in Asaih	1,500 500
Bijnor.		Mandawar Ditto Ditto	Ditto Ditto Neza Bale Salai	Chart Sudr 8th Kuar Sudr 8th 2nd Tuesday 1 n Chart	500 500 1,000
-		Ditto	Chhari Zihir Di- wan	Bhadon Sudi 9th	800
		Shakurpur Indarpur Raj	1	C TO. 3. O. 1.	200 300
	Mandawar	Semla Khurd Badshahpur Chandrabhanpu Ditto	Ditto	TO . 4.4	300 150 500 500
		Muhammadpu Deomal. Ditto	Chhipion-ka- me-	Chart Sudr 7th and 8th.	250 1,500
		Do. Do. Shahbazpur	Ganga Ashnan . Ditto Dasehia Buiha Babu	Jeth Sudi 10th Bhadon Sudi 2nd	2,000 1,000 1,000 5,000
		Bası Rohansı.	Sheoratri Ramlila	Trans Carlo Sail to	5,000
			Chhari Zahir Dı	10th.	250
	Chandpur	l ID-1	wan Ditto Ditto	. Sawan Sudi 8th Ditto	1,000
		1 7	Ditto		300

FAIRS, 1906—(continued).

Tahsıl.	Pargana.	Locality.	Name of fam.	Date.	Appio- ximate average attend- ance.
con-		Bashta	Chhari Zahii Di- wan Ditto	Bhadon Bada 8th and 9th Bhadon Bada 7th	300 800
Brjnor-(con-	Bashta	Gandaur Rasulpur Nagla	Ditto Ditto Uis Taj Khan	and 8th. Siwan Sudi 9th Siwan Sudi 7th Safar 24th	200 250 300
		Nagibabad Rimpuri A h m a d p u i Sadat	Neza Shah Madar Urs Haziat Ali . Ditto .	Muhairam 25th Ramazin 20th Ramazin 19th to 21st	500 5,000 5,000
	Najibabad <	Alipura Rampur Birwari Ditto Ditto Ditto	Neza Shah Madar, Ditto Sukhwanti Debi Ann puina Debi, Duiga Debi Chhari Zihir Di- wan.	Safar 4th Safar 5th Chart Suda 5th Chart Suda 9th Ditto Sawan Suda 8th	600 300 200 2,500 200 2,500
Najibabad		Chind Goela	Ditto . Ditto Ditto Ditto Ditto Ditto Debi-ka-mela	Sawan Badi 4th Bhadon Bidi 7th Bhadon Bidi 8th Sawin Bidi 15th Busikh Badi 5th Kutik Sudi 15th Phagun Badi 14th	200 150 100 200 6,000 6,000 300
		Parsotampur Chhapir	Basantı	Chart Sudi 5th Asarh Badi 6th and 13th	500 1,000
		Do	Do	Asaih Sudi 5th and 12th. Sawan Sudi 5th	1,000
	- (Kıratpur	Chhair Zahir Di-	Bhadon Sudi 2nd	3,000
	Kıratpur {	Banehra	Ditto	Bhadon Sudi 9th .	1,200
	Akbarabad {	Sıkrı Kumhera Sıkan dar pu ı Bası	Ditto Ditto Ditto	Ditto Ditto Sawan Sudi Ist	200 500 150
	Nagina	Nagina Do Do	Ditto Sheoratii Neza Bale Salar	Sawan Sudi 9th Phagun Badi 14th 1st Wednesday in Chart	300 2,000 600
ina		Do	Ramlıla	Kuai Badi Ist to Sudi 11th	3,000
Nagina	A faol so sh	Jatpura Anwarpun Chandika.		Kuar Sudi 10th Ditto	400 400
	Afzalgarh (Tanda Bairagi Ditto .	Do. Chhari Zahir Di- wan	Bhadon Sudi 7th	1,000 500

FAIRS, 1906—(continued).

Tahsıl.	Pargana	Locality.	Name of fai	r.	Date.	Appro- ximate average attend- ance
((Shergaih	Chhari Zahir wan.	Dı-	Bhadon Badı 7th	250
		Chandpur Afzalgarh Do Do.	Ditto Ditto Burha Babu Neza Bale Sala	 r.	Bhadon Sudi 2nd . Bhadon Badi 9th Bhadon Sudi 2nd . 31d Wednesday in Chait	150 350 250 200
		Suawala .	Ditto	٠	2nd Wednesday in Chait.	150
populo	-	Do Do .	Ramlıla Chhan Zahır wan	D1-	Kuar Sudi 10th Bhadon Badi 9th	1,000
(00)	Afzalgarh —(conclud-	Maqsudabad Alampur Gaon- ri.	Ditto	::	Ditto Ditto	150 200
Nagina—(concluded)		Shahpur Jamal Sn Basuchand Mohsinpur	Ditto Debi-ka-mela Baldeo-ka-mela Chhan Zahir I wan,		Bhadon Sudi 2nd Kuai Badi 7th Bhadon Badi 6th Bnadon Badi 8th	100 150 100 150
		Rehar . Khamabad . Maniawala . Qasimpur Gar- hi.	Ditto Ditto Ditto Ditto	::	Bhadon Badi 9th Ditto Ditto Ditto Ditto	500 500 200 250
(Ļ	Mahabatpur . Aluhiajpur .	Ditto Ditto		Ditto Ditto	100 100
	(Dhampur .	Ramlıla		Kuar Sudi 2nd to	2,000
.		Mirzapur Fatchullapur .	Urs Nabı Karir Debı-ka melı	n 	Rabi-ul-awwal 11th Sudi 7th of every	100 1,100
		Ditto	Neza Bale Sala:	r	month 2nd Wednesday in Chart	3,000
			Chhari Zahır I wan.	Di-	Sawan Sudi 7th	500
bur.	Dhampur (Khujistabad. Sheikot Amkhera	Ditto Ditto Ditto	:	Ditto Bhadon Badi 9th Ditto	400 2,5 00 300
Dham pur.	Diampur	Muhammadpur Parma. Umri	Ditto	"	Ditto	250
D.		Rasulpur Mu- hammad Quli.	Ditto Ditto		Ditto	500 100
		Makarpun Sohagpur Jot Heman Nawada Kesho	Ditto Ditto Ditto Ditto		Ditto Bhadon Badi 12th Bhadon Badi 14th Bhadon Badi 8th to	100 300 100 125
		Muhammadpur Sadat.	Ditto		10th Bhadon Badı 7th	150
	\	Padlı	Ditto		Bhadon Sudi 5th	450
	Seohara	Seohara .	Ditto	• •	Sawan Sudi 7th to 10th.	300

FAIRS 1906-(concluded)

Tahsıl	Pargana	Locality	Name of fair	Date.	Appro- vimate average attend- ance
	Seohara—	Kıwar	Chhail Zahir Di-	Bhadon Bidi 9th	100
	(conclud-)	Palanpur Ghauspui Muafi	Ditto	Ditto Rabi-us-sani 17th	100 2,000
	(Nihtaur	Neza Bale Salar,	4th Wednesday in Chart	800
		Do. Do	Neza Shah Madar Chhari Zahir Di- wan	Jumad-ul-awwal 31d	400 150
2		Dhanupura	Ditto	Bhadon Badı 13th	500
de		Gadal -	Ditto	Bhadon Badı 9th	150
lu l		Musapur	Ditto	Ditto	100
no	Nihtaur (Mujahidpur	Ditto	Bhadon Sudi 7th	400
,8		Nargadı .	Ditto	Bhadon Sudi 9th	200 300
7		Phulsanda Gan-	Ditto	Ditto .	300
Dham put—(concluded)		gadas. Phulsanda Kha kam	Burha Babu	Bhadon Sudi 2nd	200
191	1	Padla	Pujan Mala .	Chart Sudr 14th	200
IG	Į į	Mazhaipur .	Mela Nar Singh	Sunday after Bha- don Sudi 2nd	600
	1	Moi na	Ramlıla	Kuai Sudi 2nd to	600
1		Do	Chhari Zahir Di-	Bhadon Badi 9th	200
	Burhpur	Asgharipur Pheona	wan Ditto Ditto	Bhadon Sudi 9th Bhadon Sudi 9th to	400 4,000
				15th	

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